★ 1942 ★

ALMANACK NUMBER

The·Northwestern·Miller

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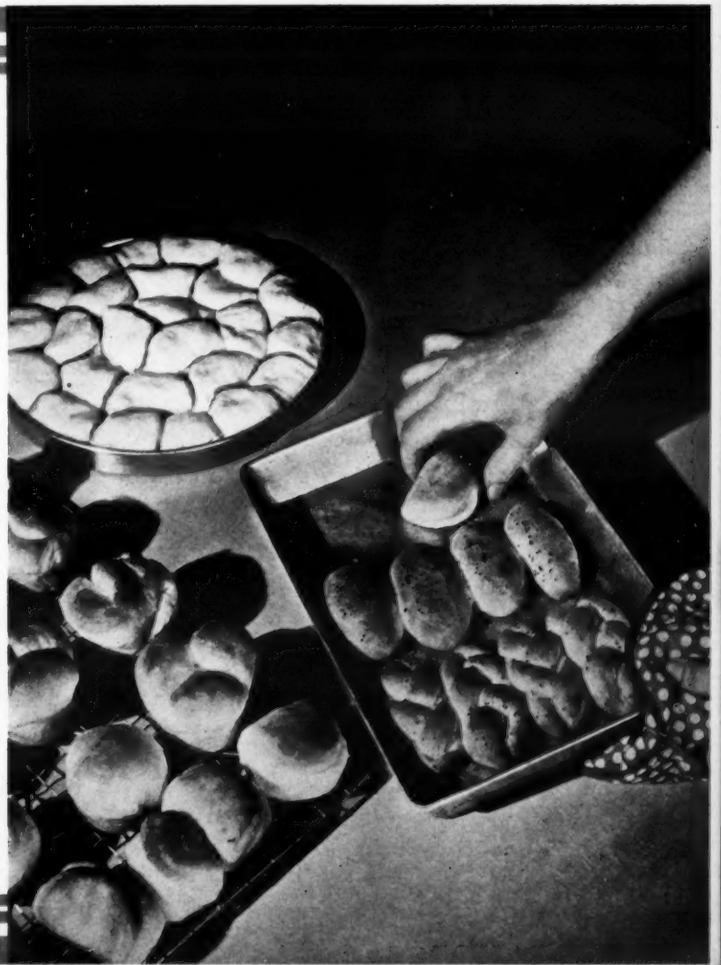
Facts and Figures of the Breadstuffs Industries



TESTED QUALITY WHEATS IN RESERVE

International's **50th** *ANNIVERSARY*

LIKE the great reserve of gold in the United States Treasury vaults, each year some of the best bread wheats are safely stored in the great elevators of five International mills, ready to be drawn upon for the milling of your flours. Millions of bushels of these fine wheats are in reserve—for International *"Bakery Proved"* Flours.

Samples from every lot of wheat, from the finest wheat growing sections of the Northwest and Southwest have been analyzed, milled and baked into bread. Every bin is earmarked—"tagged"—with a complete record of its particular milling qualities and baking characteristics.

Thus does International safeguard the baking quality of your flours, assuring you of uniformly fine fermentation and baking performance throughout the year. Whatever type of flours are best suited to your particular baking needs, for bread or rolls, you'll find them milled under International Flour brands.

Ask the International representative to show you the records of analysis and baking characteristics of the International Flours now used regularly by bakers all over the country for fine bread and rolls.

INTERNATIONAL MILLING COMPANY • MINNEAPOLIS

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WEEVIL-CIDE

The Dependable Grain Fumigant

Weevil-Cide.....

has been the leading grain fumigant in the elevators and mills of the United States and Canada during the past decade. In many terminal markets this leadership is unchallenged!

Weevil-Cide.....

has attained this dominant position because no competitive product fulfills in such measure the following requirements:

- No odor or other bad effect on grain
- Safe and convenient application
- Consistency as to results
- Stability of formula
- Great killing power
- No fire hazard
- Economical

A majority of the large users have found Weevil-Cide

—Not lowest in cost per gallon

—But lowest in unit cost per bushel for actual results

MANUFACTURED BY

THE WEEVIL-CIDE COMPANY

1110 HICKORY ST. KANSAS CITY, MO.

LARGE CAPACITY WHEAT HANDLING FACILITIES, MINNEAPOLIS ELEVATOR

Commander-Larabee's modern storage facilities and mills are located throughout all wheat growing areas of the United States — East of the Rockies

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Commander Milling Co. - - - - - Minneapolis, Minnesota
Larabee Flour Mills Co. - - - - - Kansas City, Missouri
G. B. R. Smith Milling Co. - - - - - - Sherman, Texas
Buffalo Flour Mills Corp. - - - - - - Buffalo, New York

The Northwestern Miller

In Two Sections—Section Two | MINNEAPOLIS, MINN., APRIL 29, 1942 | Volume 210 Number 5

VITAMIN AND MINERAL ENRICHMENT OF FOODS

EDITOR'S NOTE.—The compilers of this issue of THE NORTHWESTERN MILLER ALMANACK feel fortunate in being able to offer its users the accompanying admirable treatment of the history and development of the food enrichment movement. It is the work of CHARLES G. FERRARI, of General Mills, Inc., Minneapolis, who presented it, in December of 1941, as an address before the Minnesota Section of the American Chemical Society, of which he was then chairman. MR. FERRARI is assistant manager of the General Mills Research Laboratories. The data he gives on vitamin and mineral content of grain and grain products should be of encyclopedic value to the trade.

MANY intelligent people look askance at the idea of vitamin and mineral supplements in the diet, feeling that the subject has been overemphasized. Therefore, anticipating that many may hold that opinion, the first purpose of this discussion will be to lay the basis for the program of enrichment. Actually, the matter has assumed the proportions of a "movement."

For a number of years, about the last fifteen, scientific literature dealing with vitamins has been voluminous. Less research has been done on minerals. Experimentation was given impetus by the synthesis of pure vitamins, better procedures for their evaluation, and new discoveries of their role and importance in nutrition. Animal studies have been supplemented by clinical data. Both here and abroad human diets have been studied in relation to geography, to the economics of supply and distribution, and to family income levels. Further comparisons of actual diets with one that is regarded as nutritionally ideal have been made.

An example of the effect of geography is the non-uniform distribution in different parts of the world of certain foods such as sea foods, which are an important source of vitamins A and D. The effect of income on diet is greatest, of course, in the low income groups where calories or quantity, not quality, is the chief concern. More often than not the cheaper foods that furnish the energy requirements of the diet are not those that supply the necessary vitamins and minerals. Thus quantity and nutritional quality are not necessarily synonymous in any income bracket.

In 1919 McCollum introduced the term "protective foods" by which he meant milk and green-leaf vegetables. This concept grew in scope with the years, and carried with it the connotation of increased health and vitality, buoyant health if you please, with a full measure of physical and mental vigor.

If the food habits of the human race are studied over a long period of time, it is easy to discern that certain changes in these habits have resulted in reducing the ingestion of vitamins—especially members of the B complex—and minerals. For example, cooking and heating food has destroyed vitamins, particularly thiamin (vitamin B_1). In meat, which is a good source of vitamin B_1 heating may destroy 40 to 50 per cent or more. Water soluble vitamins are leached out whenever a food is boiled in water.

The refinement of foods has likewise contributed to vitamin and mineral deficiency. Cereals, of which wheat and rice are good examples, have been refined with resultant loss of vitamins. Sugar has been purified to the point where it is devoid of vitamins. Yet, grains and sugar constitute roughly half of the calories in the diet.

As our knowledge of minerals and vitamins expanded it became possible to sort out those foods that possess these nutrients to a marked degree and those in which they are deficient or lacking. A survey of human diets in the United States has revealed that in certain large segments of the population deficiencies in vitamins and minerals occur. It has been said that one-third of our population is not adequately fed. Whether or not this figure can be proved, the experts agree that malnutrition in the vitamin and mineral sense is much more extensive than was previously supposed.

For the reasons stated, governmental agencies have been sponsoring a food enrichment program designed to improve the public health. The National Research Council appointed a Committee on Food and Nutrition, and this committee has endorsed the broad basic principle of the regulated additions of certain vitamins and minerals to a few staple foods. This committee acts in an advisory capacity to the government. It is clear, then, that the food enrichment program of the government has a sound basis in scientific fact and is supported by authoritative opinion in the nutritional and medical fields. Those that think it is unwarranted faddism must be regarded as uninformed.

The approach to a solution of a nutrition problem involving the entire population requires careful study. Vitamins and minerals can be added to a food in the proportion in which they have been lost in processing. Such replacement is restoration. It is also possible to make additions beyond natural levels in the unprocessed food, or even to contribute vitamins and minerals that are not naturally present. In these instances, the addition is fortification. Enrichment is a word apart, and has legal significance, because the government in defining such foods has called them "enriched." Thus enriched flour is a definitive entity and the quantity of vitamins and minerals permissible is regulated by law. The whole subject of vitamin and mineral enrichment is intimately connected with food and drug legislation, and hence this aspect of the subject will be developed to some extent.

Food and drug regulation in the modern sense is not old. Standards of purity for certain foods were established by an act of Congress in 1903. The better known Pure Food and Drug law was enacted in 1906 and went into effect Jan. 1, 1907. It was amended in 1912 and 1913. The introduction of the act and its later enforcement was due in large measure to Dr. Harvey W. Wiley, who literally battled for it. It is a fact that this law and the regulations that grew from it gave the United States higher standards for foods and drugs than existed anywhere else in the world.

The chemistry of food and nutrition had advanced so rapidly in recent years that the pure food laws and regulations had become outmoded. The older regulations prescribed chiefly what exclusions from food were necessary; what colors were permitted and non-toxic; what preservatives were allowed and in what amount; and what constituted adulteration. Vitamins and nutritional aspects were not included. It is clear, then, that a complete revision of our pure food laws became necessary. Hence a new law was enacted called "The Federal Food, Drug and Cosmetic Act of 1938." The new act became effective June 25, 1939, following extended public hearings prior to its enactment by congress. According to the provisions of the new act, certain procedures and mechanisms have been set up which are entirely different from heretofore. Hence some of the new features of the act will be described.

The new law will be administered by the United States Department of Agriculture as in the past, but instead of coming under the Bureau of Agricultural Chemistry and Engineering, the supervision of the act has been given to a new department created by the president as part of his reorganization plan. This new department, called the Federal Security Agency, is headed at present by Paul V. McNutt, and includes the Public Health Service, Office of Education and others.

Under the new act, food regulations are set up in a unique way. The secretary of agriculture or his delegated authority announces in the *Federal Register* that a public hearing will take place in Washington at a specified date for the purpose of receiving evidence which will be used as a basis for promulgating definitions—called legally "standards of identity,"—labelling requirements, and nutritional claims. The hearings are conducted in a formal manner by a presiding officer. All interested parties may submit statements under oath, after which they may be cross-examined. Government scientists lay the basis for the regulations they think proper. Industry, consumer groups, nutrition experts and physicians may likewise testify. The entire proceedings are reported verbatim. Later written arguments may be filed by interested parties.

The hearings have frequently been quite extensive and have been especially so in the instance of enriched flour and bread. The latter, involving as they did a completely new departure in food regulations, were subject to greater controversy. It has been necessary for interested parties to spend a great deal of time and money in attendance at the hearings. At the close of a hearing a copy of the testimony may be obtained. The bread hearing is a good example of just how extensive the proceedings may be. The official record covered 4,162 pages. Those desiring a transcript paid 15c a page for it, or $625. Anyone requiring transcripts on the day following the testimony paid at the rate of 30c a page, or a total of over $1,200, if all the testimony was secured in this manner.

It is the duty of the officer presiding at the hearings to review the record critically. His analysis of the subject matter is printed in the *Federal Register* under such headings as "suggested findings of fact," and "conclusions reached." Within ten days from publication any interested party may object in writing to any of the matter so published. Lastly, after a study of the record, an order is issued prescribing and promulgating the

INTRODUCTION AND ACKNOWLEDGEMENT

FOR more than three decades THE NORTHWESTERN MILLER ALMANACK has been the standard fact publication of flour and feed milling, the grain trade, commercial baking and the industries associated with these trades. To subscribers of THE NORTHWESTERN MILLER the ALMANACK is sent as a special section, with no additional charge. The 1942 edition appears as Section II of THE NORTHWESTERN MILLER of April 29.

Since the first aim of the editors of the ALMANACK is accuracy, statements of fact and statistical data are obtained from the most authoritative sources. These, however, sometimes err. So do the editors, and so, once in a while, do the types. Readers will confer a favor by calling attention to inaccuracies. In all cases the statistics presented are the latest available, but in many instances they are preliminary and subject to later revision.

Compilation of the ALMANACK is greatly facilitated by the cordial co-operation of a great many people who, in their private or official capacities, assist in assembling and checking the included data. THE NORTHWESTERN MILLER is especially indebted to departments of government, federal, state and foreign; to officers of trade associations, boards of trade and chambers of commerce; to faithful individuals who have responded promptly and courteously to requests for information.

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★ OUR TWENTY-TWO YEAR RECORD ★

A Roll Call of the Major Operations in Construction for the Milling, Grain and Associated Industries

ABILENE FLOUR MILLS CO., Abilene, Kansas.
(1924) 65,000-bushel Concrete Storage
(1925) 70,000 bushels Storage Bins
ACME FLOUR MILLS CO., Oklahoma City, Okla.
(1925) 200,000 bushels Storage Bins
(1927) 110,000 bushels Additional Storage
ACME MILLS, Hopkinsville, Ky.
(1927) Warehouse and 1,000-barrel Mill, Designed, Erected and Machinery Installed
ALBERS BROS. MILLING CO.
(1934) Oakland, Cal., 200,000 bushels Concrete Storage
(1934) Seattle, Wash., 530,000 bushels Concrete Storage
(1935) Oakland, Cal., Oatmeal Mill
(1940) Oakland, Cal., 500,000-bushel Elevator
ARCADY FARMS MILLING CO., Kansas City, Mo.
(1928) 28,000-bushel Concrete Elevator
ARNOLD MILLING CO., Sterling, Kansas
(1929) 100,000-bushel Concrete Elevator
ATCHISON, TOPEKA & SANTA FE RAILWAY CO.
(1933) Morris, Kansas, Concrete Elevator
ATKINSON MILLING CO., Minneapolis, Minn.
(1939) 500,000 bushels Storage
BALLARD & BALLARD CO., Louisville, Ky.
(1930) 750,000 bushels Additional Storage
BARTON COUNTY FLOUR MILLS CO., Great Bend, Kan.
(1927) 75,000-bushel Concrete Elevator
(1931) 137,000 bushels Additional Storage
BLAIR MILLING CO., Atchison, Kansas
(1923) Concrete Mill and Elevator
BOULEVARD ELEVATORS, INC., Kansas City
(1931) 363,000 bushels Additional Storage
BURLINGTON ELEVATOR CO., Omaha, Neb.,
(1929) 600,000-bushel Concrete Elevator
CANADIAN MILL & ELEVATOR CO., El Reno, Okla.
(1932) Concrete Storage
(1935) Reinforced Concrete Flour Mill Building and Warehouse
(1935) 100,000 bushels Storage
CHICKASHA MILLING CO., Chickasha, Okla.
(1925) 125,000 bushels Storage and Brick Warehouse
(1928) 300-barrel Corn Mill, 300,000-bushel Elevator, Office and Warehouse
A. B. CHRISMAN GRAIN CO., Meredosia, Ill.
(1940) 200,000-bushel Elevator
COLLINGWOOD GRAIN CO.
(1925) Pretty Prairie, Kansas, 80,000-bushel Concrete Elevator
(1927) Collano, Kan., 100,000-bushel Concrete Elevator
COMMANDER-LARABEE MILLING CO., Minneapolis, Minn.
(1930) 300,000 bus Additional Storage at Sherman, Texas
(1932) 800,000 bus Concrete Storage at Wellington, Kan.
DES MOINES ELEVATOR & GRAIN CO., Des Moines, Iowa
(1930) 350,000 bushels Additional Storage

» 1941 «

ATKINSON MILLING CO., Minneapolis, Minn.
Bulk Flour Storage

DES MOINES ELEVATOR CO., Des Moines, Iowa
350,000-bushel Elevator

GARRISON MILLING CO., Oklahoma City, Okla.
250,000-bushel Elevator

INTERNATIONAL MILLING CO., Minneapolis, Minn.
Tenth Contract—500,000-bushel Elevator, Sioux City, Iowa

LEVAL & COMPANY, Minneapolis, Minn.
1,450,000-bushel Elevator

MILLER MALT COMPANY, Los Angeles, Calif.
225,000-bushel Elevator

MISSOURI PORTLAND CEMENT CO., St. Louis, Mo.
Cement Plant Improvements at Sugar Creek, Mo.

MOUNTAIN CITY MILL CO., Inc., Chattanooga, Tenn.
500,000-bushel Elevator

PERMANENTE CORPORATION, Redwood City, Cal.
Cement Silos

PILLSBURY FLOUR MILLS CO., Minneapolis, Minn.
330,000-bushel Storage and Cleaning House at Sacramento, Calif.

POULTRYMEN'S CO-OPERATIVE ASS'N OF SOUTHERN CALIFORNIA, Los Angeles, Calif.
250,000-bushel Elevator

RALSTON PURINA COMPANY, St. Louis, Mo.
Soybean Processing Plant at Iowa Falls, Iowa

TERMINAL GRAIN CORP., Sioux City, Iowa
500,000-bushel Elevator

PARIS MILLING CO., Paris, Texas
(1927) 200,000 bushels Concrete Storage
PEARLSTONE MILL & ELEVATOR CO., Dallas, Texas (4 contracts)
(1922) 175,000-bushel Concrete Elevator
(1923) 140,000 bushels Additional Storage
(1925) 300-barrel Corn Meal Mill
(1927) 300,000 bushels Additional Storage
PILLSBURY FLOUR MILLS CO., Minneapolis (1923 to date)
5 Elevators, with 5,200,000 bushels capacity, 2 Flour Mills, Cereal Plant, Bulk Flour Storage, Warehouses
PONCA CITY MILLING CO., Ponca City, Okla.
(1922) 65,000-bushel Concrete Elevator
(1930) 350,000 bushels Additional Storage
POULTRY PRODUCERS OF CENTRAL CALIFORNIA, Petaluma, Calif.
(1937) 500,000-bu Elevator, Feed Mill and Warehouses
E. G. RALL GRAIN CO., Fort Worth, Texas
(1924) 200,000-bushel Concrete Storage
(1929) 200,000 bushels Additional Storage
RALSTON-PURINA CO., St. Louis, Mo. (1924 to date)
12 Elevators or Additions for 3 Feed Mills, 4 Warehouses, 12 Elevators or Additions, with Storage capacity of 2,435,000 bushels, Office Buildings
ROANOKE CITY MILLS, INC., Roanoke, Va.
(1935) 150,000 bushels Storage
RODNEY MILLING CO., Kansas City, Mo.
(1936) 400,000 bushels Additional Storage
RUSSELL MILLING CO., Russell, Kansas
(1923) Tempering Bins and Cleaner House
(1923) 30,000-bushel Concrete Elevator at Balta, Kansas
(1928) 100,000 bushels Additional Storage
SCOTT COUNTY MILLING CO., Sikeston, Mo.
(1940) 300,000-bushel Elevator
SECURITY ELEVATOR CO., Hutchinson, Kansas
(1925) 200,000 bushels Storage Bins
(1928) 350,000 bushels Additional Storage
(1929) 650,000 bushels Additional Storage
SHAWNEE MILLING CO., Shawnee, Okla.
(1920) 300,000-bushel Concrete Elevator
(1931) 230,000 bushels Additional Storage
(1934) 1,000-barrel Flour Mill
SMITH BROS. GRAIN CO., Fort Worth, Texas
(1923) 150,000-bushel Concrete Tanks
SOUTHWEST TERMINAL ELEVATOR CO., Enid, Okla.
(1926) 540,000-bushel Reinforced Concrete Terminal Grain Elevator
(1927) 500,000 bushels Additional Storage
SPENCER-KELLOGG & SONS, INC., Decatur, Ill.
(1939) 1,000,000 bushels Storage
STAFFORD COUNTY FLOUR MILLS CO., Hudson, Kansas
(1928) 75,000 bushels Additional Storage

BUILDERS of 62,100,000 BUSHELS of MODERN CONCRETE STORAGE

DEWEY PORTLAND CEMENT CO. (6 contracts)
Davenport, Iowa, Reinforced Concrete Stock and Pack House and Cement Storage
Dewey, Okla., Rock Storage
DOBRY FLOUR MILLS, INC., Yukon, Okla.
(1934) 800-barrel Flour Mill and Concrete Elevator
DODGE CITY (KANSAS) TERMINAL ELEVATOR CO.
(1929) 500,000-bushel Concrete Elevator
EAGLE MILLING CO., Edmond, Okla.
(1925) 100,000-bushel Concrete Storage
EARLY & DANIEL CO., Cincinnati, Ohio
(1939) 1,000,000 bushels Storage
ENID TERMINAL ELEVATOR CO., Enid, Okla.,
(1926) 540,000-bushel Concrete Terminal Elevator
(1927) 500,000 bushels Additional Storage
(1931) 720,000 bushels Additional Storage
FARMERS NATIONAL GRAIN CORP., Fremont, Neb.
(1931) 480,000 bushels Additional Storage
FEDERAL MILL, INC., Lockport, N. Y.
(1931) 261,000-bushel Concrete Elevator
(1940) Bulk Flour Storage
GALVESTON WHARF CO., Galveston, Texas
(1929) 4,500,000-bushel Concrete Elevator
GARRISON MILLING CO., Oklahoma City, Okla.
(1931) 230,000 bushels Additional Storage
GENERAL MILLS, INC., Minneapolis (1921 to date)
14 Contracts for 10 Elevators with 5,648,000 bus capacity, Flour Mills, Feed Mill, Cleaner House, Bulk Storage, Warehouses and Office Buildings
GLOBE GRAIN & MILLING CO., Ogden, Utah
(1930) 750,000 bushels Additional Storage
GOERZ FLOUR MILLS CO., Newton, Kansas
(1920) Concrete Office
(1923) Concrete Warehouse
RAMON GONZALEZ, Nuevo Laredo Tamps, Mexico
(1926) 200-bbl Reinforced Concrete Flour Mill
D. H. GRANDIN MILLING CO., Jamestown, N. Y.
(1927) 75,000-bushel Concrete Milling Elevator
GREAT WESTERN SUGAR CO., Ovid, Colo.
(1940) Bulk Sugar Storage
HACKER FLOUR MILLS, Jefferson, Okla.,
(1934) Rebuilding Flour Mill Building
HARDEMAN-KING CO., Oklahoma City, Okla.
(1924) Feed Mill, Warehouse and Elevator
HONEYMEAD PRODUCTS CO., Cedar Rapids, Iowa
(1940) 300,000-bushel Elevator
HOUSTON MILLING CO., Houston, Texas
(1925) 500,000 bushels Concrete Storage
(1936) 500,000 bushels Additional Storage
(1940) Reconstruction following explosion
IGLEHEART BROS., INC., Vincennes, Ind.
(1940) Corn Shelling Plant
INLAND MILLING CO., Des Moines, Iowa
(1928) 128,000 bushels Additional Storage
(1936) 250,000 bushels Additional Storage
INTERNATIONAL MILLING CO., Minneapolis (1926 to date)
Nine Contracts for Eight Elevators and Additions with Storage Capacity of 7,025,000 bushels
K. B. R. MILLING CO., McPherson, Kansas
(1931) 96,000 bus Additional Storage at Marquette, Kan.
WILLIAM KELLY MILLING CO., Hutchinson, Kansas
(1925) 250,000 bushels Storage Bins
(1927) 250,000 bushels Additional Storage
KIMBELL MILLING CO., Fort Worth, Texas, and Associated Companies (1924 to date)
10 Contracts for 9 Elevators and Additions with 4,526,000 bushels capacity, Fireproof Warehouse
W. J. LAWTHER MILLS, Dallas, Texas (two contracts)
(1924 and 1928) Feed Mill and Elevator
H. D. LEE FLOUR MILLS CO., Salina, Kansas
(1923) 300,000-bushel Elevator and Tempering Bins
MAY GRAIN CO., Independence, Mo.
(1921) 20,000-bushel Concrete Elevator
MILLER MALTING CO., Los Angeles, Cal.
(1938) 250,000-bushel Elevator and Complete Barley Malting Plant
MISSOURI PORTLAND CEMENT CO., Kansas City, Mo.
(1936) Additional Cement Storage
(1940) New Packing Plant
MONTANA FLOUR MILLS CO., Cleveland, Ohio
(1936) 500,000-bushel Concrete Elevator
NEBRASKA CONSOLIDATED MILL CO., Omaha, Neb.
(1935) 350,000-bushel Elevator at Grand Island, Neb.
(1940) Flour Mill Building and Warehouses and 250,000-bushel Elevator at Decatur, Ala.
NEW ERA MILLING CO., Arkansas City, Kansas
(1927) 125,000 bushels Additional Storage
WILLIS NORTON CO., Wichita, Kansas
(1928) 500,000 bushels Additional Storage
OKLAHOMA WHEAT POOL ELEVATOR CORP., Enid, Okla.
(1930) 1,000,000-bushel Concrete Elevator
A. E. STALEY MFG. CO., Decatur, Ill.
(1939) 2,500,000 bushels Storage
THEO. STIVERS MILLING CO., Rome, Ga.
(1930) 600-barrel Concrete Flour Mill
TERMINAL GRAIN CORP., Sioux City, Iowa
(1928) 500,000 bushels Additional Storage
TEXHOMA ELEVATOR CO., Texhoma, Okla.
(1929) 100,000-bushel Concrete Elevator
TEX-O-KAN FLOUR MILLS CO. (Dallas) PROPERTIES
(1920) Kingfisher, Okla., Concrete Mill Building (Burrus mill)
(1924) San Antonio, Texas, 300,000-bushel Concrete Elevator (Liberty mill)
(1934) Fort Worth, Texas, 3,000-barrel Flour Mill Building (Burrus mill)
UNITED MILLS CO., Grafton, Ohio
(1931) 300,000-bushel Concrete Elevator
(1935) 300,000 bushels Storage
UNIVERSAL ATLAS CEMENT CO., Waco, Texas
(1936) Cement Storage
UNIVERSAL MILLS, Fort Worth, Texas
(1922) Concrete Feed Plant Building
VITA CEREAL CO., Kansas City, Mo.
(1922) Concrete Cereal Plant at Bonner Springs, Kansas
V-O MILLING CO., Los Angeles, Cal.
(1933) 500,000-bushel Concrete Elevator, Warehouses and 800-barrel Flour Mill
(1937) Concrete Flour Storage, Blending Plant and Grain Storage
WALL-ROGALSKY MILLING CO., McPherson, Kansas
(1928) 150,000 bushels Additional Storage
WALNUT CREEK MILLING CO., Great Bend, Kansas
(1922) 250,000-bushel Concrete Elevator
WESTERN STAR MILL CO., Salina, Kansas
(1921) Concrete Tempering Bins and Cleaning House
WESTERN TERMINAL ELEVATOR CO., Hutchinson, Kan.
(1927) 250,000-bushel Concrete Elevator
(1928) 300,000 bushels Additional Storage
(1930) 600,000 bushels Additional Storage
J. C. WHALEY ELEVATOR, Lubbock, Texas
(1927) 500,000-bu Concrete Elevator and Head House
WOLF MILLING CO., Ellinwood, Kansas
(1928) 80,000 bushels Additional Storage
YUKON MILL & GRAIN CO., Yukon, Okla.
(1922) Concrete and Brick Mill Building at Yukon
(1925) 20,000-bushel Concrete Elevator at Banner, Okla.

Inquire of Any of These Concerns About Our Work

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Designers and Builders for Millers and the American Grain Trade

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Vermillion, South Dakota

Tri-State Milling Company
Rapid City
South Dakota

Gentlemen:

I notice that the bags in which your Swan's Down Flour is packed bear the Bemis "Cat in the bag" trademark. I want to thank you for having printing on these flour sacks that comes out in washing with no effort at all. I do appreciate not having to boil the sacks in lye to remove the printing before I use the cloth for garments.

Use of this cloth means quite a lot to me, because there are eight of us in our family and we use all the way from 24 to 30 sacks of flour a year.

I thank you mentally every time I wash a sack.

Mrs. J. R. Armstrong

Mrs. J. R. Armstrong and her daughter show garments they have made from Swan's Down flour bags. Notice that there's not a trace of the Bemis Washout Inks with which the Swan's Down brand was printed.

Thousands of Families Make Clothing from Bemis Flour Bags

THOUSANDS of families that buy flour and feed in Bemis Bags, with brands brilliantly printed in Bemis Washout Inks, enjoy a bonus of extra value. They use the bag materials in making garments. It will cost you nothing to give this bonus to users of *your* products. Get in touch with your Bemis man for details.

BEMIS BRO. BAG CO.

OFFICES: Boston • Brooklyn • Buffalo • Chicago • Denver
Detroit • East Pepperell • Houston • Indianapolis • Kansas City • Los
Angeles • Louisville • Memphis • Minneapolis • New Orleans
New York City • Norfolk • Oklahoma City • Omaha • Peoria • Pittsburgh • St. Louis
Salina • Salt Lake City • San Francisco • Seattle • Wichita

HIGH QUALITY FLOURS BRING RICH REWARDS

★ **DANIEL WEBSTER** ... *Short Patent*
★ **GOLD COIN** ..... *Standard Patent*
★ **CHALLENGER** ..... *Strong Patent*
★ **PURE SILVER** ..... *Fancy First Clear*
★ **GOLD COIN WHOLE WHEAT**
★ **GOLD COIN RYE FLOURS** *All Grades*

To bakers who prefer to do their own enriching, we can supply .... EAGLE ENRICHED CONCENTRATE.

EAGLE ROLLER MILL COMPANY

NEW ULM MINNESOTA

regulations which will govern the status of the product involved effective from and after a specified date. In this manner food and drug definitions and regulations are formulated in a democracy. It has all the elements of fairness and impartiality.

The government has, by the procedure outlined above, already established new standards of identity for a number of products and is in the process of formulating others. It will be some time before the entire gamut of foods, drugs and cosmetics is run. The broad program of vitamin and mineral additions covers a variety of foods. Among the most important on this program has been enriched flour and bread. Others have received their share of consideration, and because they are the more easily dealt with, they will be discussed first.

In April, 1941, the definitions and standards of identity for oleomargarine were promulgated. In the regulations based on the findings of fact vitamin A is permitted at a level of not less than 9,000 U.S.P. units per lb, with or without accompanying vitamin D. In spite of the repercussions in the dairy industry the government has held to the view that vitamin A imparts nutritive properties to oleomargarine that are not otherwise present and regards such additions with favor on the ground that it is used by many consumers as butter. The vitamin A level of 9,000 U.S.P. units per lb is comparable to the average value of butter. The regulation has already gone into effect (Sept., 1941). Many of you have read about it in the newspapers, and may have discerned that the dairy industry does not relish this competition with butter. A discussion of this highly controversial subject is quite beyond the scope of this paper.

Evaporated milk and cream has been defined to permit the addition of vitamin D either by irradiation or the addition of vitamin D concentrates to a level of not less than 7.5 U.S.P. units per avoirdupois oz. This corresponds to a level of 270 units per qt of evaporated milk.

Fluid milk has been defined with vitamin D as an optional ingredient, the levels being set at 135 U.S.P. units per qt for irradiated milk and 400 per qt for milk to which concentrates are added. The minimum daily requirement of vitamin D has been defined by the government as 400 U.S.P. units.

The benefit to public health resulting from small additions of iodine to salt has long been recognized, and the new standard of identity for salt continues the previously permitted addition.

Dietary foods have been defined tentatively as those to which vitamin or mineral supplements or both may be added, and special regulations are being promulgated setting forth the minimum requirements for permitted additions of vitamin A, B_1, B_2, C, D; the minerals calcium, phosphorus, and iron; and iodine. The labelling regulations for dietary foods require a statement of the percentage of the daily requirement supplied by a "quantity customarily or usually consumed during a period of one day, or a quantity reasonably suitable for and practicable of consumption within such period." These statements must appear in addition to composition and other information usually required on labels.

Enriched flour and enriched bread have been the subject of many long hearings. In these instances a more ambitious program of vitamin and mineral restoration has been attempted in the interest of public health. For this reason more time will be devoted to a consideration of these products.

It has been shown that wheat contains many vitamins of the vitamin B complex essential in human nutrition. Thus it contains thiamin (vitamin B_1), riboflavin (vitamin B_2), niacin (nicotinic acid), and others for which the human requirements are not well known. In addition wheat contains some minerals, notably phosphorus and iron, along with unimportant quantities of some others. Whole wheat is an excellent source of thiamin, a fair source of riboflavin, and a good source of nicotinic acid. Compared with other foods it is a rich source of iron. For the reason that wheat naturally contains these nutrients and for the further reason that bread is one of the most universally consumed foods, flour and bread have been endorsed as a vehicle for carrying better nutrition to the people. Such endorsement received additional impetus when Great Britain officially recognized the lack of thiamin in the British diet and announced a program for the enrichment of flour at public expense.

To establish levels for the enrichment of any food it is necessary to weigh the objectives carefully and to define the approach to the problem. It is not so easy to do this as may appear. Consideration must be given to the necessity for adding any particular vitamin or mineral. In a country the size of the United States the diets of the people in different sections are not the same, and deficiencies that are pronounced in one section may not occur at all in another. It becomes a problem, then, of deciding whether or not an enriched food like flour should carry increased nutritive elements to the entire population when only a fraction of the population may require such an addition. A good example of this problem is presented by pellagra.

Again, when vitamins and mineral additions are made to a product like flour, are such additions to be made on the basis of restoring the quantities lost in processing or should the addition exceed the levels found in the natural product? If the latter is done, then it is obvious that one particular food is being enriched for the purpose of supplementing deficiencies in others. For example, sugar, as has been mentioned, is devoid of vitamins, but it constitutes a substantial fraction of the caloric value of the diet. Should flour carry the load for sugar by adding to flour certain nutritive factors beyond their natural levels in whole wheat? Should flour, because it is so generally consumed by all sections of the population, be fortified with nutritive factors entirely absent from wheat? These are philosophical questions that go beyond the realm of the laboratory, but the answers to such questions must be given to define clearly the objectives of enrichment. The decision must be based on a broad analysis of public health requirements and may be considered as a form of preventive medicine.

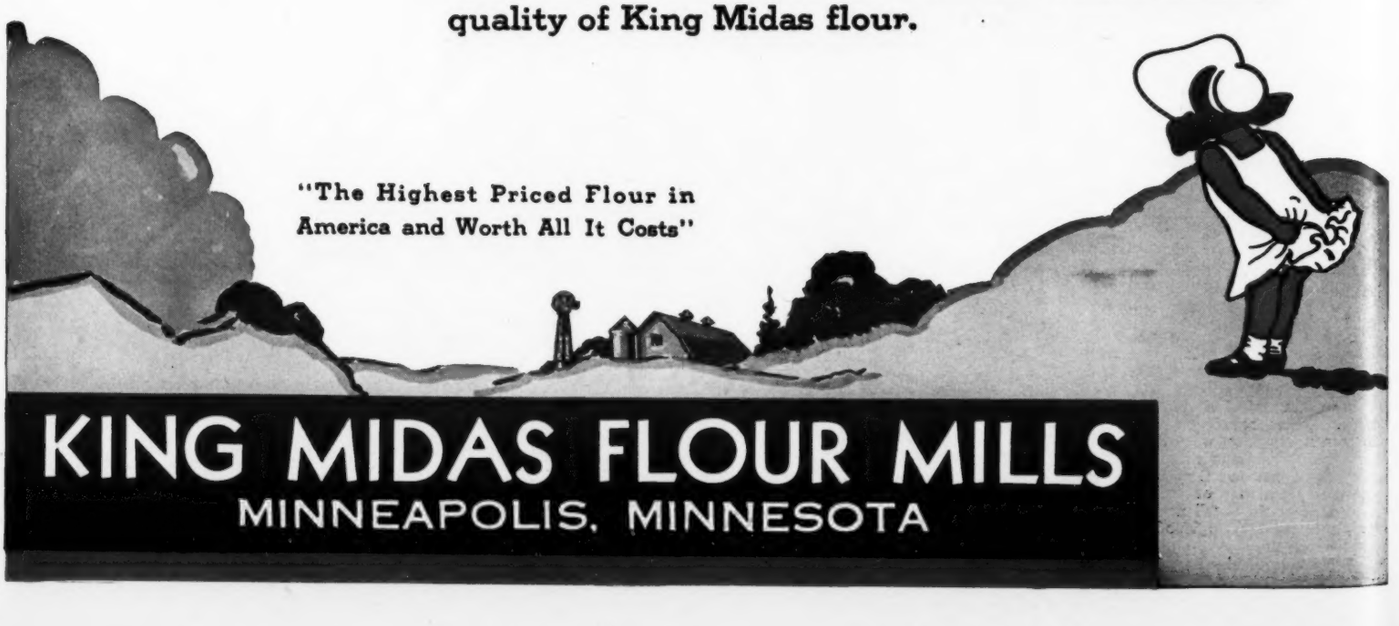
The introduction of roller milling and purification systems led to the production of white patent flour. Wheat consists of three major structures, the endo-

(Continued on page 74.)

MORE MILLS USE.. V-90
THAN ALL OTHER BRANDS OF PHOSPHATES COMBINED!
VICTOR CHEMICAL WORKS
CHICAGO ILLINOIS
And Hundreds of others, too!

King Midas FLOUR

THE quality of wheat governs the quality of flour. It takes the best wheat to make the best flour and King Midas is proud of its facilities for buying and storing the finest wheat available. We operate hundreds of country elevators, strategically scattered throughout the spring wheat belt, together with millions of bushels of grain storage capacity at Minneapolis and Hastings. As a result, we are always assured of a source of supply from which to choose just the type of wheat necessary to maintain the constant, neverfailing quality of King Midas flour.



KING MIDAS FLOUR MILLS
MINNEAPOLIS, MINNESOTA

REGISTRATION OF TRADE-MARKS

Extracts from laws of the United States authorizing the registration of trade-marks:

"The owner of a trademark used in commerce with foreign nations, or among the several states, or with Indian tribes, provided such owner shall be domiciled within the territory of the United States, or resides in or is located in any foreign country, which, by treaty, convention, or law, affords similar privileges to the citizens of the United States, may obtain registration for such trademark by complying with the following requirements: First, by filing in the Patent Office an application therefor, in writing, addressed to the Commissioner of Patents, signed by the applicant, specifying his name, domicile, location, and citizenship; the class of merchandise and the particular description of goods comprised in such class to which the trademark is appropriated; a statement of the mode in which the same is applied and affixed to goods and the length of time during which the trademark has been used; a description of the trademark itself shall be included, if desired by the applicant or required by the commissioner, provided such description is of a character to meet the approval of the commissioner. With this statement shall be filed a drawing of the trademark, signed by the applicant, or his attorney, and such number of specimens of the trademark, as actually used, as may be required by the Commissioner of Patents. Second, by paying into the Treasury of the United States the sum of $15, and otherwise complying with the requirements of this act and such regulations as may be prescribed by the Commissioner of Patents.

"The application prescribed in the foregoing section, in order to create any right whatever in favor of the party filing it, must be accompanied by a written declaration verified by the applicant, or by a member of the firm or an officer of the corporation or association applying, to the effect that the applicant believes himself or the firm, corporation, or association in whose behalf he makes the application to be the owner of the trademark sought to be registered, and that no other person, firm, corporation, or association, to the best of the applicant's knowledge and belief, has the right to use such trademark in the United States, either in the identical form or in such near resemblance thereto as might be calculated to deceive; that such trademark is used in commerce among the several states, or with foreign nations, or with Indian tribes, and that the description and drawing presented truly represent the trademark sought to be registered. If the applicant resides or is located in a foreign country, the statement required shall, in addition to the foregoing, set forth that the trademark has been registered by the applicant, or that an application for the registration thereof has been filed by him in the foreign country in which he resides or is located, and shall give the date of such registration, or the application therefor, as the case may be, except that in the application in such cases it shall not be necessary to state that the mark has been used in commerce with the United States or among the states thereof. The verification required by this section may be made before any person within the United States authorized by law to administer oaths, or, when the applicant resides in a foreign country, before any minister, charge d'affaires, consul, or commercial agent holding commission under the government of the United States, or before any notary public, judge, or magistrate having an official seal and authorized to administer oaths in the foreign country in which the applicant may be whose authority shall be proved by a certificate of a diplomatic or consular officer of the United States."

"No trademark will be registered which consists of or comprises immoral or scandalous matter, or which consists of or comprises the flag or coat of arms or other insignia of the United States, or any simulation thereof, or of any state or municipality, or of any foreign nation, or which consists of or comprises any design or picture that has been adopted by any fraternal society as its emblem, or of any name, distinguishing mark, character, emblem, colors, flag, or banner adopted by any institution, organization, club, or society which was incorporated in any state in the United States prior to the date of the adoption and use by the applicant: provided, that said name, distinguishing mark, character, emblem, colors, flag, or banner was adopted and publicly used by said institution, organization, club, or society prior to the date of adoption and use by the applicant; unless it shall be shown to the satisfaction of the Commissioner of Patents that the mark was adopted and used as a trademark by the applicant or applicant's predecessors, from whom title is derived, at a date prior to the date of its adoption by such fraternal society as its emblem, or which trademark is identical with a registered or known trademark owned and in use by another, and appropriated to merchandise of the same descriptive properties, or which so nearly resembles a registered or known trademark owned and in use by another, and appropriated to merchandise of the same descriptive properties as to be likely to cause confusion or mistake in the minds of the public, or to deceive purchasers; no portrait of a living individual will be registered as a trademark, except by the consent of such individual evidenced by an instrument in writing; and no trademark will be registered which is used in unlawful business, or upon any article injurious in itself, or which has been used with the design of deceiving the public in the purchase of merchandise, or which is abandoned."

"A certificate of registration shall remain in force for 20 years, except that in the case of trademarks previously registered in a foreign country, such certificates shall cease to be in force on the day on which the trademark ceases to be protected in such foreign country, and shall in no case remain in force more than 20 years, unless renewed. Certificates of registration may be, from time to time, renewed for like periods on payment of the renewal fees required by this act, upon request by the registrant, his legal representatives or transferees of record in the Patent Office, and such request may be made at any time not more than six months prior to the expiration of the period for which the certificates of registration were issued or renewed. Certificates of registration in force at the date at which this act takes effect shall remain in force for the period for which they were issued, but shall be renewable on the same conditions and for the same periods as certificates issued under the provisions of this act, and when so renewed shall have the same force and effect as certificates issued under this act."

A fee of $15 is required by law to be paid with each application for the registration of a trademark, and for its renewal, and this fee will include the certificate of registration, if the trademark be determined to be registrable.

FLOUR AND CEREAL PACKAGING FOR FOREIGN SHIPMENT

The larger shippers of flour normally use bags as export containers for practically all their foreign shipments. The bags are of different sizes and of different materials, depending chiefly upon the foreign market and the customer's instructions. One of the largest exporters ships in bags ranging from 1 to 220 lbs, made chiefly of cotton and drill. Small and medium-sized bags are packed in larger bags made of 10- or 12-oz jute, the heavier bags being used where transshipment or rough handling may be anticipated. The more commonly used packings are as follows:

1-lb muslin bag—50 in one jute bag.
5-lb muslin bag—20 in one jute bag.
10-lb muslin bag—10, 20 or 25 in one jute bag.
12-lb muslin bag—8 in one jute bag.
12½-lb muslin bag—10 or 12 in one jute bag.
24-lb muslin bag—4 or 5 in one jute bag.
50-lb muslin bag—3 in one jute bag.
50½-lb drill bag—3 in one jute bag.
98-lb muslin bag—1 or 2 in one jute bag.

In some instances, where protection against moisture and humidity is important, the inner bags are made of osnaburg, a coarse cotton cloth, treated so as to be waterproof, or of rubberized drill. Both these materials are water-resisting.

Occasionally, in shipping to damp tropical countries where resistance to spoilage is of prime importance, tin drums with plywood jackets or plywood drums are used. The tin drums are 14¼ inches high and have a diameter of 16½ inches and a 12½-inch opening. The tins hold either 50 or 65 lbs of flour, and the opening is sealed by soldering a tin plate across the top. The plywood drums in common use hold 10 10-lb cotton bags of flour or 11 2½-kilogram cotton bags.

Packaged cereals or breakfast foods are protected to some extent against moisture damage by the waxed paper that is used to wrap the regular cardboard containers in which the cereals are packed for sale. Several of the larger companies in this field use 175-lb test corrugated fiberboard box, gross weight limit 40 lbs, as the outer shipping container, and report obtaining satisfactory results.

Source of the foregoing information is "Modern Export Packing," published by the Bureau of Foreign and Domestic Commerce, U. S. Department of Agriculture, in Trade Promotion Series No. 207.

Packaging customs or requirements of flour importing countries are given as follows:

Azores—97-lb sacks.

Baltic States—Same as Scandinavia, more often jute.

Barbados and Turks Island—Cotton 98-lb bags, 196-lb cottons, 7-lb cottons (14 being inclosed in jute) are the most common packages.

Bermuda—Usually standard packages are taken, but sometimes 100-lb bags are used.

Bolivia—American flour is imported in drill sacks of 23 kilos, two of which are inclosed in a burlap bag; also in 100-lb cotton bags inclosed in an outer burlap sack.

Brazil—50-kilo bags now compulsory.

British Honduras—A large part of the imported flour comes in 98-lb sacks, although 196, 24, 12 and 6-lb bags are also used.

British West Africa—196-lb barrels, also 95, 49, 24½, 10 and 5-lb bags. Bags should be strong to guard against rough handling and should be moisture resisting.

Canada—Imports very little flour. It is all border trade, and no standard package is used.

Canary Islands—50 and 60-kilo sacks.

Chile—23 and 46-kilo Osnaburg bags.

China—Cloth sacks of 49 lbs each are used.

Honduras—In 196 and 98-lb sacks. Also in 96-lb sacks containing smaller bags weighing 12, 16 or 24 lbs each.

Hongkong—Cloth sacks of 49 lbs each are used.

Italy—100-kilo cotton and jute.

Jamaica—196-lb sacks are most commonly used; 7-lb cotton and 3½-lb cotton (14 and 28 respectively in jute outer cover) are also used.

Japan—Cloth sacks of 49 lbs each are used.

Madeira—60-kilo and 63½-kilo cotton bags are commonly used.

Malta—Flour is usually imported in heavy cotton bags of 140 and 280 lbs.

Mexico—Usually in 49 and 98-lb bags. Flour is packed in regular cotton bags when coming by rail.

Netherlands—Same as Scandinavia, more often jute.

Netherlands East Indies—49-lb sacks customary; larger sacks not generally acceptable; cotton sacks preferred. Weight of cotton sacks regulated; 50 and 68-kilo sacks also used.

Netherlands West Indies—Sacks of 98 and 196 lbs are used.

Nicaragua—Six 25-lb or three 50-lb cotton bags in a jute sack are customarily used.

Panama—Most imported flour comes in 98-lb cotton bags with jute oversack. Other standard containers are acceptable.

Peru—49, 98 and 101-lb cotton bags are commonly used. The larger sizes usually have an outside bag of jute.

Philippine Islands—Sacks of 49 lbs, cotton.

Salvador, El—49-lb drill bags in a jute oversack are commonly used.

Scandinavian Countries—50 and 100-kilo cotton and jute bags are commonly used. Inner bags of paper with outer sacks of stronger material are also frequently employed.

Colombia—In 25-lb cottons packed five or six in a jute outer cover. Waterproof packages are frequently used.

Costa Rica—Four cotton sacks inclosed in one jute bag. Cotton sacks contain 49 lbs each.

Cuba—A large proportion of imported flour is packed in 196-lb Osnaburg bags.

Dominican Republic—Flour is shipped in 12½ and 25-lb cottons. These small bags in a large jute sack containing 10 of the 12½-lb bags or five of the 25-lb bags; also loose in 125 and 196-lb cotton sacks inclosed in a jute sack of medium weight.

Dutch and British Guiana—Flour is imported in 98 and 196-lb cottons.

Ecuador—Two 49-lb cottons inclosed in a jute sack are customary; also two 98-lb cottons in a jute sack.

Egypt—American flour is usually imported in 140-lb jutes; Australian flour in 150-lb jutes; European flour in 100-kilo sacks.

French West Indies—85-kilo heavy cotton bags are commonly used; also 196, 100 and 25-lb cotton bags.

Germany—Same as Scandinavia, more often jute.

Great Britain—Flour is generally imported in 140 and 280-lb sacks.

Greece—Flour is imported in 198 and 127-lb sacks. Special high grade flour is imported in 11-lb bags.

Guatemala—Practically all imported flour comes in heavy jute sacks containing three 50-lb bags. For retail grocery or family trade, in 24-lb cotton bags, four of which are inclosed in one jute bag, or in 12-lb cotton bags, eight to a jute bag.

Haiti—Flour is chiefly imported in burlap sacks, each sack containing four 49-lb or eight 24½-lb bags. Also loose in 196 and 98-lb Osnaburgs. Twenty 10-lb and 10 20-lb retail bags are packed in a single jute bag.

Trinidad—98 and 196-lb sacks are commonly used.

Venezuela—Much of the flour imported comes in bags of 49 and 98 lbs. They are cotton and double, and are not inclosed in burlap. Flour is also imported in 196-lb, 45 and 90-kilo cotton sacks, inclosed in burlap.

FOREIGN WEIGHTS AND MEASURES

Equivalents in Avoirdupois

Argentine Republic—		
Ton, 1,000 kilos, equals	*2,204½	lbs
Hectare of land equals	2.471	acres
A "sack" of flour weighs	280	lbs
A "bag" of flour weighs	140	lbs
A barrel of flour weighs net	196	lbs
Russia—		
1 pood equals	36	lbs
10 poods equal 1 chetvert or	360	lbs
100 chetverts of wheat equal	72	qrs
100 chetverts of seed equal	83	qrs
100 chetverts of barley equal	88	qrs
100 chetverts of rye equal	74	qrs
100 chetverts of oats equal	68	qrs
France—		
1,000 kilogrammes equal	1	†ton
218.2 kilogrammes equal	480	lbs
225.45 kilogrammes equal	496	lbs
1 quintal, 100 kilos, equals	220½	lbs
180 charges equal	100	qrs
1 hectolitre equals	2.8	bus
Holland—		
1 last of wheat equals	10¾	qrs
1 last of barley equals	10¾	qrs
1 last of oats equals	10¾	qrs
1 German last of wheat equals	9⅛	qrs
100 Egyptian ardebs of wheat equal	62⅛	qrs
816 Constantinople kilos equal	100	qrs
100 Galatz kilos equal	143	qrs
100 Ibrail kilos equal	252	qrs
100 Malta salms of wheat equal	102	qrs
5 Spanish fanegas of wheat equal about	1	qr
350 Austrian stajas of wheat equal	100	qrs
25 Portuguese alqueire of wheat equal	1¼	qrs
472.81 Vienna metzen equal	100	qrs
19 Austro-Hungarian minots equal	4	qrs
1 Smyrna kilo equals	1	bu
1 Barcelona cras of wheat equals	1.925	bus
10 Norway maas—1 maller—equal	4.126	bus
1 Vienna metze equals	1.7	bus
1 Chilean fanega equals	154⅛	lbs
1 maund Indian wheat seed equals	82	lbs
1 Chinese or Japanese picul equals	133⅓	lbs
1 Japanese koku equals	5.11	bus
A quarter weighs—		
English (8 bus)	480	lbs
California wheat	500	lbs
Other American wheat	480	lbs
Chilean wheat	480	lbs
South Russian wheat	492	lbs
American maize	480	lbs
Danubian maize	480	lbs
Danubian wheat	480	lbs
Odessa maize	492	lbs
Galatz maize	462	lbs
Barley	400	lbs
Oats varies from	304 to 336	lbs
Metric ton equals	2,204.6	lbs
A long ton equals	2,240	lbs
A short ton equals	2,000	lbs
100 kilos equal	220½	lbs
50 kilos equal	110¼	lbs

*In Argentine trade, is reckoned as 2,200 lbs. †Long ton.

To reduce bushels of American maize (corn) to quarters (480 lbs) multiply by 7 and divide by 60. To reduce sacks of flour (280 lbs) to barrels (196 lbs) multiply by 10 and divide by 7. Reverse operation to change 196 lbs into 280 lbs.

The weight of a barrel of flour is based on the old English "stone" of 14 lbs—14 stone being taken as a barrel. The sack has 20 stone; thus a 280-lb sack is 20-14ths of a barrel, or, for convenience of figuring, we say 10-7ths. Bearing this in mind, it is easy to reduce sacks to barrels, or vice versa.

To reduce cwts. English (112 lbs) of flour to barrels (196 lbs), multiply by 4 and divide by 7.

Equivalent Freight per Bushel

To find the freight per bu at any given rate per 100 lbs, in cents:

Freight per 100 lbs	Wheat 60 lbs	Corn 56 lbs	Oats 32 lbs
2	1.20	1.12	.64
2½	1.50	1.40	.80
3	1.80	1.68	.96
3½	2.10	1.96	1.12
4	2.40	2.24	1.28
4½	2.70	2.52	1.44
5	3.00	2.80	1.60
5½	3.30	3.08	1.76
6	3.60	3.36	1.92
6½	3.90	3.64	2.08
7	4.20	3.92	2.24
7½	4.50	4.20	2.40
8	4.80	4.48	2.56
8½	5.10	4.76	2.72
9	5.40	5.04	2.88
10	6.00	5.60	3.20
11	6.60	6.16	3.52
12	7.20	6.72	3.84
13	7.80	7.28	4.16
14	8.40	7.84	4.48
15	9.00	8.40	4.80
16	9.60	8.96	5.12
17	10.20	9.52	5.44
18	10.80	10.08	5.76
19	11.40	10.64	6.08
20	12.00	11.20	6.40
21	12.60	11.76	6.72
22	13.20	12.32	7.04
23	13.80	12.88	7.36
24	14.40	13.44	7.68
25	15.00	14.00	8.00
26	15.60	14.56	8.32
27	16.20	15.12	8.64
28	16.80	15.68	8.96
29	17.40	16.24	9.28
30	18.00	16.80	9.60

The Bushel

The volume of a bushel measure in the United States (called Winchester bushel) is 2,150.42 cubic inches; this is equivalent to a cube each side of which is about 12.9 inches.

The volume of a bushel measure in England (called imperial bushel) is about 3.1 per cent greater than the bushel measure used in the United States; it contains 2,219.36 cubic inches, which is equivalent to a cube each side of which measures slightly more than 13 inches.

Transactions in wheat are now made almost wholly on the basis of bushels, not of a certain volume but of a definite weight, 60 lbs.

A legalized bushel weight has been established by the United States government (mainly for customs purposes) for a few agricultural products, as follows: barley, 48 lbs; castor beans, shelled, 50; buckwheat, 48; corn, shelled, 56; corn meal, 48; flaxseed (linseed), 56; oats, 32; peas, 60; potatoes, 60; rye, 56; wheat, 60.

The bushel weights adopted by the Bureau of Statistics of the Department of Agriculture are as follows:

Barley, 48 lbs; beans (dry), 60; buckwheat, 48; clover seed, 60; corn, shelled, 56; corn on cob, 70; flaxseed, 56; oats, 32; peaches, 48; potatoes, 60; rye, 56; timothy seed, 45; wheat, 60.

Kernels in Bushel of Wheat

Calculations made by the North Dakota state seed department on hard red spring wheat indicate the number of kernels in a measured bushel to be as follows: 1,000,000 in 60-lb wheat, 1,300,000 in 55-lb wheat, 1,500,000 in 50-lb wheat, 1,700,000 in 45-lb wheat, 1,800,000 in 40-lb wheat.

RULES ADOPTED BY THE FEED TRADE

The following are the rules of the Grain and Feed Dealers National Association governing transactions in feedstuffs. They have been adopted by the Millers National Federation, and practically all of the markets:

Rule 1—Trade. It shall be the duty of both buyer and seller to include in their original articles of trade, however conducted, the following specifications: number of sacks, tons or cars; kind and grade of feed; price; rate basing point; time of shipment; terms of payment, sight draft unless otherwise specified.

Rule 2—Confirmation. (a) It shall be the duty of both buyer and seller, not later than the close of business day following date of trade, to mail, each to the other, a confirmation in writing (the buyer a confirmation of purchase and the seller a confirmation of sale), setting forth the specifications as agreed upon in the original articles of trade. Upon receipt of said confirmation the parties thereto shall carefully check all specifications named therein and, upon finding any differences, shall immediately notify the other party to the contract, by wire or telephone, and confirm in writing, except in the case of manifest errors and differences of minor character, in which event notice by return mail will suffice.

(b) When a trade is made through a broker, it shall be the duty of the broker, not later than the close of business day following date of trade, to send a written confirmation to each of the principals (to the buyer a confirmation of sale and to the seller a confirmation of purchase) setting forth the specifications of the trade as made by him. Upon receipt of said confirmations, the parties thereto shall carefully check all specifications named therein and, upon finding any differences, shall immediately notify the other party to the contract by wire or telephone, and confirm in writing. In default of such notice the contract shall be filled in accordance with the terms of the confirmation issued by the broker.

Rule 3—Brokers. (a) A broker is one who is engaged for others, on a commission basis, in negotiating contracts relative to property with the custody of which, actual or constructive, he has no concern.

A person is not a broker—

First: Who has possession and absolute control of merchandise shipped to him to sell and collect the proceeds. (Therefore, a commission merchant, to whom feed is consigned for sale, is not a broker.)

Second: Who receives a salary instead of a commission or brokerage.

Third: Who acts for one principal to the exclusion of all others.

(b) A broker has power to bind his principals only to the extent of his instructions, and the principals are not liable for any acts of the broker in excess of such instructions.

(c) A broker who, in good faith or otherwise, exceeds his authority, is liable for resulting damages.

(d) A broker who negotiates a contract without disclosing his principal's name is responsible as principal until the real principal's name is given and accepted by the other party.

(e) A broker who in good faith negotiates a contract which is in accord with instructions from both his principals, who at the time of the negotiations advises each principal of the name of the other, and who completes such negotiations in accordance with the rules and customs governing such transaction, thereby fulfills all his obligations and has no further liability to either of his principals, unless otherwise agreed. The contract so negotiated is valid and binding between the buyer and seller, the same as if it had been negotiated directly between them.

(f) Brokerage shall be credited when contract is accepted by principals to the transaction, unless otherwise specified.

Rule 4—Bills of Lading. Bills of lading attached either to invoices or to drafts shall be original and negotiable and in conformity with the specifications of the contract on which the shipment is to apply, and shall be signed in accordance with the rules of carriers. Any loss resulting from irregular or incorrect bills of lading shall be paid by the seller.

Rule 5—Demurrage and/or Additional Charges. The seller shall be liable for any demurrage and/or additional charges accruing on feed billed to "shipper's order," when such charges can be shown to have accrued by reason of the inability of the buyer, through act of the seller or his agent, to get possession of the bill of lading, whenever said bill of lading is necessary to furnish disposition.

Rule 6—War Tax on Freight Charges. (Repealed Oct. 3, 1922.)

Rule 7—Carload. A carload shall be forty thousand (40,000) pounds, unless otherwise specified at times of purchase; provided, that where rules of carriers lawfully on file with the Interstate Commerce Commission or state railway commissions provide for minimum carload weights in excess of the above, such minimum weights shall constitute a carload within the meaning of this rule.

Rule 8—Maker of Feed. Durum wheat by-products shall not be deliverable on contracts for wheat feeds unless so specified.

Rule 9—Origin of Feed. (a) A sale of feedstuffs shall not of necessity mean that the feedstuffs will originate at the home address of the seller. If at time of sale buyer requests origin, seller is obliged to give same by zones, as follows:

Zone No. 1.—Shall mean either Kansas, Nebraska, Oklahoma, Texas.

Zone No. 2.—Shall mean either Missouri, Illinois, Iowa.

Zone No. 3.—Shall mean either Indiana, Ohio, Michigan, Kentucky, Tennessee.

Zone No. 4.—Shall mean either Minnesota, Wisconsin, North Dakota, South Dakota, Montana.

Zone No. 5.—Shall mean either Colorado, Utah, Wyoming, Oregon, Washington, California, Idaho.

Zone No. 6.—Shall mean either New York, Pennsylvania, Virginia, Maryland.

(b) A sale of feedstuffs contemplates shipment from mills on or after the date of sale, unless otherwise specified.

(c) The differential in freight rates shall be those in effect on date of contract of sale from seller's business address, unless otherwise specified.

Rule 10—Privileges. In all delivered sales to any terminal markets the point specified shall be considered as a rate basis only and not necessarily final destination of goods, and shipment shall be made to any point and via any line open for business designated by the buyer which is reached by lake, or lake-and-rail lines during the season of navigation, or by all-rail trunk lines at other times, at the differential in effect at the time of contract of sale, as shown by published tariff rates; provided shipment is made within contract time, and provided further, that such routing is in accord with transit arrangements of shipper.

Rule 11—Definitions. In the absence of agreements to the contrary, definitions of feedstuffs shall be the same as those adopted and promulgated by the Association of Feed Control Officials of the United States.

Rule 12—Packing. (a) It shall be understood that all feedstuffs when sold in sacks shall be packed in new bags, unless otherwise specified at time of trade.

(b) The weight of packages shall be net when packed, and two thousand (2,000) pounds net shall constitute a ton.

(c) Each package of feed must bear a complete label, on which must be printed, in uniform type, a list of the ingredients in the package, showing percentages and protein content. The label must be printed on one side of a tag attached to the package or upon one side of the package itself. In either case the label must be clear and distinct, in type of sufficient size to be easily read, and must conform in all cases to the uniform label adopted by the Association of Feed Control Officials of the United States.

Rule 13—Shortage, Damage and/or Overcharge. (a) All claims for shortage and/or damage shall be made by the receiver within fifteen (15) days after arrival, and must be accompanied by paid expense bill with railroad agent's notations as to damages; likewise condition of equipment and seals.

(b) Upon receipt within thirty (30) days after arrival of complete papers covering freight overcharges on delivered sales, seller shall immediately reimburse buyer. Upon receipt of complete papers, in such case, at any time after thirty (30) days from date of arrival, seller will undertake to collect claim for account of buyer.

Rule 14—(a) Immediate or Rush Shipment shall mean shipment within three (3) calendar days from the date of receipt of shipping instructions, including day instructions are received by seller.

(b) Quick Shipment shall mean shipment within seven (7) calendar days from date of receipt of shipping instructions, including day instructions are received by seller.

(c) Prompt Shipment shall mean shipment within fourteen (14) calendar days from the date of receipt of shipping instructions, including day instructions are received by seller.

(d) Unspecified Shipment. Where shipment is not specified, prompt shipment is understood.

(e) Loaded, Spot, Instant or on Track shall mean that the goods are actually loaded and ready for billing, and the lading must be dated on the day of sale.

(f) In Transit shall mean that the lading must be dated at least one day prior to date of sale.

(g) Deferred Shipment. In the purchase and sale of feed for deferred shipment the following specifications shall govern:

Where a specific number of days is not specified in contract, but the time is referred to as first half or second half of a given month, it shall be understood that up to midnight of the 15th shall be considered the first half (this including February), the remainder of the month to be considered as second half.

(h) The date on original bill of lading, from point of origin, as shown on exchange of bill of lading, shall be accepted as the original date of shipment; provided the shipment originates in the zone specified.

(i) Season Shipments. Season shipments shall mean shipment any time, at the seller's option, between the date of sale and Dec. 31 of the current year, inclusive.

(j) On all shipments the date of issuance of bill of lading, signed by the agent of the railroad issuing same, shall be conclusive evidence of date of shipment, unless conclusive evidence to the contrary can be shown.

Rule 15—Directions. Unless otherwise agreed in the contract, all sales are understood to be for shipment at seller's option at any time during time of shipment specified or provided for in contract.

Specifications on sales for spot, immediate or quick shipment, or for shipment within less than fourteen (14) days, must be furnished by buyer at the time contract is made; and if so furnished, seller shall make shipment within time of shipment specified or provided for in contract.

Specifications on sales for prompt shipment must be furnished by buyer as follows: If not demanded by seller, specifications must be furnished within fourteen (14) days from making of contract, and if demanded by seller at any time at or after making of contract specifications must be furnished within three (3) days after such demand; and if so furnished, seller shall make shipment within fourteen (14) days after receipt of specifications.

Specifications on sales for shipment within fourteen (14) days or more but not more than thirty-one (31) days from making of contract must be furnished by buyer as follows: If not demanded by seller, specifications must be furnished within contract time; and if demanded by seller at any time at or after making of contract, specifications must be furnished within three (3) days after such demand; and if specifications, whether demanded or not, are furnished by buyer within three (3) days after making of contract, seller shall make shipment within contract time.

Specifications on sales for shipment extending more than thirty-one (31) days from making of contract are not due from buyer until commencement of contract time of shipment but must be furnished by buyer as follows: If not demanded by seller, specifications must be furnished by buyer within contract time of shipment; if demanded by seller at any time at or after commencement of time of shipment specified in contract, specifications must be furnished within three (3) days after such demand; and if so furnished by the buyer, provided the same are received by the seller at least fourteen (14) days before the last day of contract time of shipment, seller shall make shipment within contract time.

If, in any of the cases above mentioned and while the contract is still in force, specifications are furnished after the first three (3) days of time of shipment specified or provided for in the contract shall have expired, the time of shipment shall be extended so that seller shall have the same amount of time after the receipt of specifications, within which to make shipment, as the length of time of shipment specified or provided for in the contract; and if so furnished, seller shall make shipment within the time of shipment as so extended under the foregoing provisions.

If specifications are demanded by seller and are not furnished by buyer within three (3) days thereafter (in case last day of time of shipment is thirty-one (31) days or less from date of contract) or within three (3) days after commencement of period of shipment in case last day of time of shipment is more than thirty-one (31) days from date of contract, seller may, at any subsequent time before receipt of specifications, elect to treat the contract as broken and to hold the buyer for breach of contract. If the seller so elects, seller shall give notice to buyer of such election by sending a telegram or mailing a letter to buyer before the receipt of specifications.

The contract shall be deemed broken by the buyer at the expiration of the time of shipment mentioned or provided for in the contract, in the following case, viz: If specifications are demanded by seller during contract time, and buyer has failed to furnish same in accordance with the foregoing provisions, and the seller has not during contract time given notice to buyer of the seller's election to treat the contract as broken. If the seller elects to hold buyer for breach of contract, the seller shall give notice to the buyer of such election by sending a telegram or mailing a letter to the buyer prior to noon of the day following the expiration of the time of shipment specified or provided for in the contract.

If a buyer violates any of the other terms of the contract, amounting to a breach of contract, the seller shall, if he elects to treat the contract as broken by reason thereof, give notice of such election to buyer by sending a telegram or mailing a letter to the buyer prior to noon of the day following the day on which the seller receives notice of such violation by the buyer.

In the event buyer fails to furnish specifications as required under these rules, or violates any of the other terms of the contract, amounting to breach of contract, and the seller gives due notice, as above provided, of its election to hold the buyer for breach of contract, the seller shall have the following rights:

(a) To resell goods in the open market for buyer's account, buyer to pay seller the loss incurred; or,

(b) To retain goods, buyer to pay seller difference between contract price and market price in the event of market price being lower, and also in addition thereto such actual expense as shall have been incurred.

(c) To cancel the contract on any unshipped portion thereof.

(d) It shall be the duty of the seller, without demand, in event of default of contract, to notify buyer of that fact by wire or telephone prior to noon of day following date of expiration of contract.

Within twenty-four (24) hours after the seller gives due notice, as above provided, of its election to hold the buyer for breach of contract, the seller must give notice to the buyer which one of the above rights seller elects to exercise, such notice to be given by mailing letter or sending telegram to buyer.

If the seller fails to ship as required by the contract or violates any of the other terms of the contract, amounting to breach of contract, the buyer shall, if he elects to treat the contract as broken by reason thereof, give notice of such election to the seller by sending a telegram or mailing a letter to the seller prior to noon of the day following the day upon which the buyer receives notice of such violation by the seller.

In the event seller fails to ship as required under these rules or violates any of the other terms of the contract, amounting to breach of contract, and the buyer gives due notice, as above provided, of his election to hold the seller for breach of contract, the buyer shall have the following rights:

(e) To cancel that part of the contract upon which there has been default; or,

(f) To buy in the open market a like quantity and quality of feedstuffs for seller's account, seller to pay buyer the loss incurred; or,

(g) Seller to pay difference between the contract price and market price, if the market price is higher than the contract price, and in addition such actual expense as shall have been incurred.

Within twenty-four (24) hours after the buyer gives due notice, as above provided, of his election to hold the seller for breach of contract, buyer must give notice to the seller which one of the above rights buyer elects to exercise, such notice to be given by mailing letter or sending telegram to seller.

In event the buyer's notice is not received by the seller at any time before shipment, the contract shall be extended so as to include the shipment and delivery when made.

A change in specifications previously filed with the seller does not extend any contract except upon mutual agreement at the time such change is requested.

Rule 16—Registration. On sales of feedstuffs the seller guarantees that the feedstuffs shall comply with the laws of the state into which it is sold, including registration and tax, if any, unless otherwise agreed at the time of sale.

Rule 17—Refusal of Shipment. Failure to make any shipment in keeping with the terms and conditions of a contract shall be grounds for the refusal only of such shipment or shipments, and not for the rescission of the entire contract or any other contract between buyer and seller.

Rule 18—Arbitration. In cases of arbitration of disputes resulting from transactions in feedstuffs, where one or both parties to the dispute are members of trade associations or exchanges that have adopted these rules, these rules shall define the rights of the parties and shall be the basis of award.

DEFINITIONS OF FEEDINGSTUFFS

The following definitions have been approved by the Association of American Feed Control Officials for grain by-products feeds:

BARLEY PRODUCTS

Barley Feed is the entire by-product resulting from the manufacture of pearl barley from clean barley.

Barley Hulls is the product consisting of the outer coverings of the barley.

Barley Mixed Feed is the entire offal from the milling of barley flour from clean barley, and is composed of barley hulls and barley middlings.

Ground Barley is the entire product obtained by grinding clean, sound barley, containing not less than 90% pure barley and not more than 10% of other grains, weed seeds and other foreign material, and not more than 6% crude fiber; provided, that no portion of this stated 10% of other grains, weed seeds or other foreign material shall be intentionally added.

Mixed Feed Barley is the entire product obtained by grinding country run barley containing not less than 75% pure barley and not more than 25% of other grains, weed seeds and other foreign material; provided, that no portion of this stated 25% of other grains, weed seeds or foreign material shall be intentionally added. The ingredients must be stated as barley, other grains, weed seeds and foreign material.

BUCKWHEAT PRODUCTS

Buckwheat Shorts or Buckwheat Middlings is that portion of the buckwheat grain immediately inside the hull, obtained from the commercial milling of buckwheat flour and shall contain not more than 10% of crude fiber. (Suggested 1941.)

CHOP

Chop is a ground or chopped feed composed of one or more different cereals or by-products thereof. If it bears a name descriptive of the kind of cereals, it must be made exclusively of the entire grains of those cereals.

CORN PRODUCTS

Corn Germ Cake consists of corn germ with other parts of the corn kernel from which part of the oil has been pressed, and is the product obtained in the dry milling process of manufacture of corn meal, corn grits, hominy feed and other corn products.

Corn Germ Meal is ground corn germ cake.

Corn Gluten Feed is that part of the commercial shelled corn that remains after the extraction of the larger part of the starch and germ by the processes employed in the wet milling manufacture of corn starch or syrup. It may or it may not contain one or more of the following: corn solubles, corn oil meal.

Corn Gluten Meal is that part of the commercial shelled corn that remains after the extraction of the larger part of the starch and germ, and the separation of the bran by the process employed in the wet milling manufacture of cornstarch or syrup. It may or it may not contain one or more of the following: corn solubles, corn oil meal.

Corn Oil Cake consists of the corn germ from which part of the oil has been pressed, and is the product obtained in the wet milling process of manufacture of cornstarch, corn syrup and other corn products.

Corn Oil Meal is ground corn oil cake.

Corn Chop, Ground Corn or Cracked Corn is the entire product made by grinding, cutting or chopping the grains of sound Indian corn, and may be fine, medium or coarse, and must not contain more than 4% of foreign material.

Screened Corn Chop, Screened Ground Corn, or Screened Cracked Corn is the coarse portion of corn chop, ground corn or cracked corn from which most of the fine particles have been removed, and must not contain more than 4% of foreign material.

Corn Meal (Feeding) is finely ground, unbolted corn.

Corn Bran is the outer coating of the corn kernel, with little or none of the starchy part or germ.

Corn Feed Meal is the fine siftings obtained in the manufacture of screened corn chop, screened ground corn or screened cracked corn, with or without its aspiration products added.

Corn Grits, Hominy Grits is the product consisting of the fine or medium-sized, hard, flinty portions of sound Indian corn containing little or none of the bran or germ.

Corn Screenings is the product consisting of the small, light grains of corn, parts of grains of corn or other cereals, and other materials having feeding value, separately or together, obtained by screening shelled corn, excluding sand, dirt and other similar inert materials.

Ear Corn Chops is corn and cob chopped, without the husk, with no greater proportion of cob than occurs in the ear corn in its natural state.

Maltose Process Corn Gluten Feed is the dried residue from degermed corn, after removal of the starch in the manufacture of malt syrup.

Hominy Feed is a mixture of corn bran, corn germ and a part of the starchy portion of either white or yellow corn kernels or mixture thereof as produced in the manufacture of pearl hominy, hominy grits or table meal, and shall contain not less than 5% of crude fat. If prefixed with the words "white" or "yellow," the product must correspond thereto.

OAT PRODUCTS

Oats Hulls is the product consisting of the outer covering of the oat.

Oat Middlings is the product consisting of the floury portions of the oat groat obtained in the milling of rolled oats.

Oat Shorts is the product consisting of the covering of the oat grain lying immediately inside the hull, being a fuzzy material carrying with it considerable portions of the fine floury part of the groat obtained in the milling of rolled oats.

Clipped Oat By-product is the by-product obtained in the manufacture of clipped oats. It may contain the light, chaffy material broken from the end of the hulls, empty hulls, light, immature oats and dust. It must not contain an excessive amount of oat hulls.

Oat Chop, Ground Oats, Pulverized Oats, Crushed Oats or Crimped Oats consists of the entire product made by grinding, chopping, cutting, crushing or crimping whole oats.

Oat Groats are the kernels produced from cleaned and dried oats in the process of manufacturing oatmeal.

Hulled Oats, Undried Oat Groats are the kernels produced from the undried grain in the process of hulling oats.

Feeding Oatmeal is a product obtained in the manufacture of rolled oats groats or rolled oats and consists of broken rolled oat groats, oat groat chips, and floury portions of the oat groats, with only such quantity of finely ground oat hulls as is unavoidable in the usual process of commercial milling. It must not contain more than 4% of crude fiber.

Oat Millfeed (Oat Hulls, Oat Shorts and Oat Middlings) is the entire by-product produced in the manufacture of oat groats and consists of oat hulls, oat shorts and oat middlings. If used in a mixed feed, it shall be called Oat Millfeed (Oat Hulls, Oat Shorts and Oat Middlings).

Cut Oat Groats, Cracked Oat Groats, or **Ground Oat Groats,** is the product produced by cutting, cracking or grinding oat groats.

RYE PRODUCTS

Rye Bran is the coarse outer covering of the rye kernel as separated from the cleaned and scoured rye.

Rye Feed, a by-product obtained in the usual process of the milling of rye flour from cleaned and scoured rye grain, consisting principally of the mill run of the outer covering of the rye grain and the germs, with small quantities of flour and aleurone.

Rye Flour Middlings consist of the rye feed, rye red dog and pure dark rye flour combined in the proportions obtained in the milling of rye flour, and must not contain more than 5% of crude fiber.

Rye Low Grade Feed Flour consists principally of dark rye flour and small quantities of aleurone and fine bran particles, and must not contain more than 1.5% crude fiber.

Rye Middlings consist of the rye feed and the rye red dog combined in the proportions obtained in the usual process of milling rye flour.

Rye Red Dog, a by-product obtained in the usual process of the milling of rye flour, consisting principally of aleurone with small quantities of flour and fine bran particles, and must not contain more than 3.5% crude fiber.

SCREENINGS

Scourings consist of such portions of the cuticle, brush, white caps, dust, smut, and other materials as are separated from the grain in the usual commercial process of scouring.

Screenings consist of a mixture of mill or elevator run materials or a combination of varying amounts of materials obtained in the process of cleaning grain or seed, either or both, such as inferior, light or broken grain or seed, weed seeds, hulls, chaff, joints, straw, elevator dust, floor sweepings. They must be relatively free of unpalatable or injurious weed seeds, sand and dirt. They must not contain more than 14% of fiber or more than 6.50% of ash. If they bear a name descriptive of their kind or origin, they must correspond thereto.

Screenings, Grain, consist of inferior, light or broken grain or seed obtained in the process of cleaning grain or seed or recleaning screenings, either or both. They must be relatively free of weed seeds, chaff, straw, hulls, joints, sand and dirt, and other foreign materials. If they bear a name descriptive of their kind or origin, they must correspond thereto.

Screenings Waste or Screenings Refuse is a mixture of materials or combination of varying amounts of materials obtained in the process of cleaning grain or seed, either or both, or recleaning screenings, such as weed seeds which may be unpalatable or injurious, chaff, hulls, straw, sticks, joints, elevator dust, floor sweepings, sand and dirt.

NOTE.—If to any of the wheat or rye by-product feeds there should be added screenings, or scourings, as above defined, either ground or unground, bolted or unbolted, such brand shall be so registered, labeled and sold as clearly to indicate this fact. The word "Screenings" or "Scourings," as the case may be, shall appear as a part of the name or brand, and shall be printed in the same size and face of type as the remainder of the brand name. When the word "Screenings" appears it is not necessary to show also on the labeling the word "Scourings."

The crude fiber standards as shown in the definitions for wheat and rye products apply also if screenings are added.

WHEAT PRODUCTS

Wheat Bran is the coarse outer covering of the wheat kernel as separated from cleaned and scoured wheat in the usual process of commercial milling.

Standard Middlings consist mostly of fine particles of wheat bran, wheat germ and very little of the fibrous offal obtained from the "tail of the mill." This product must be obtained in the usual commercial process of milling, and must not contain more than 9.5% of crude fiber.

Flour Middlings shall consist of wheat standard middlings and wheat red dog combined in the proportions obtained in the usual process of milling, and must not contain more than 6% of crude fiber.

Gray Shorts (Gray Middlings or Total Shorts) consist of the fine particles of the outer bran, the inner or bee-wing bran, the germ, and the offal or fibrous materials obtained from the "tail of the mill." This product must be obtained in the usual process of commercial milling, and must not contain more than 6% of crude fiber.

Brown Shorts (Red Shorts) consist mostly of the fine particles of wheat bran, wheat germ and very little of the fibrous offal obtained from the "tail of the mill." This product must be obtained in the usual commercial process of milling and must not contain more than 7.5% of crude fiber.

Wheat Bran and Standard Middlings consist of the two commodities as defined (see wheat bran and wheat standard middlings), mixed in the proportions obtained in the usual process of commercial milling.

Wheat Low Grade Feed Flour is a by-product obtained in the usual commercial process of flour milling, consisting principally of wheat flour with small quantities of aleurone and fine wheat bran particles, and must not contain more than 1.5% of crude fiber.

Wheat Mixed Feed (Mill Run Wheat Feed) consists of wheat bran and the gray or total shorts combined in the proportions obtained in the usual process of commercial milling. This product must not contain more than 8.5% of crude fiber.

Wheat Red Dog, a by-product obtained in the usual commercial process of flour milling, consisting principally of aleurone with small quantities of wheat flour and fine wheat bran particles and must not contain more than 4% of crude fiber.

White Shorts or **White Middlings** consist of a small portion of the fine wheat bran particles and the wheat germ and a large portion of the fibrous offal obtained from the "tail of the mill." This product must be obtained in the usual process of flour milling, and must not contain more than 3.5% of crude fiber.

Hard Wheat Mixed Feed (Mill Run Wheat Feed) consists of wheat bran and wheat flour middlings combined in the proportions obtained in the usual process of commercial milling. This product must not contain more than 9.5% of crude fiber.

Cable Language Abbreviations

Abbreviations used by cable companies, in cablegrams, written immediately before address, in accordance with stipulations of European governments, are as follows:

CDE—Indicates message is in code.
LC—Indicates message in language of country of origin—deferred rate.
LCD—Indicates message in language of destination.
LCF—Indicates message in French language.
NLT—Night letter.
PLT—Post letter telegram available to Canada, Newfoundland and St. Pierre Miquelon.
RP—Reply paid.

Meaning of "Sack" and "Bag"

In trade with the United Kingdom, the word "sack" signifies 280 lbs. A "bag" signifies 140 lbs.

The capacity of British mills is rated in sacks of 280 lbs per hour. What is known as a 20-sack mill has a capacity, according to American standards, of about 700 bbls per day of 24 hours.

Diamond Bread Board

Diamond grating boards are used by native women of parts of British Guiana in making their daily bread. They are made by covering a slab of wood with thick wax and imbedding therein rough diamonds panned from near-by streams.

U. S. STANDARDS FOR CORN

United States grain standards for corn, effective Jan. 20, 1937 (revised October, 1940), are as follows:

Corn shall be any grain which consists of 50% or more of shelled corn of the dent or flint varieties, and may contain not more than 10% of other grains for which standards have been established under the provisions of the United States Grain Standards Act. (The specifications of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug and Cosmetic Act.)

Classes.—Corn shall be divided into three classes, as follows: class I, yellow corn; class II, white corn; and class III, mixed corn.

YELLOW CORN (CLASS I)

This class shall include yellow corn, and may include not more than 5% of corn of other colors. A slight tinge of red on kernels of corn otherwise yellow shall not affect their classification as yellow corn.

WHITE CORN (CLASS II)

This class shall include white corn, and may include not more than 2% of corn of other colors. A slight tinge of light straw color or of pink on kernels of corn otherwise white shall not affect their classification as white corn.

MIXED CORN (CLASS III)

This class shall consist of corn of various colors that does not meet the color requirements for either of the classes yellow corn or white corn. White-capped yellow kernels shall be classified as mixed corn.

GRADES

Corn shall be graded and designated according to the respective grade requirements of the numerical grades and sample grade of its appropriate class, and according to the special grades when applicable.

See table below.

SPECIAL GRADES FOR CORN

Flint Corn

Definition.—Flint corn shall be corn of any class which consists of 95% or more of corn of any of the flint varieties.

Grades.—Flint corn shall be graded and designated according to the grade requirements of the standards applicable to such corn if it were not flint corn, and the word "flint" shall be added to, and made a part of, the grade designation, immediately following the words yellow corn, or white corn or mixed corn, as the case may be.

FLINT AND DENT CORN

Definition.—Flint and dent corn shall be corn of any class which consists of a mixture of the flint and dent varieties and which contains more than 5%, but less than 95%, of corn of any of the flint varieties.

Grades.—Flint and dent corn shall be graded and designated according to the grade requirements of the standards applicable to such corn if it were not flint and dent corn, and the words "flint and dent" shall be added to, and made a part of, the grade designation, immediately following the words yellow corn, or white corn, or mixed corn, as the case may be.

Weevily Corn

Definition.—Weevily corn shall be corn that is infested with live weevils or other insects injurious to stored grain.

Grades.—Weevily corn shall be graded and designated according to the grade requirements of the standards applicable to such corn if it were not weevily, and there shall be added to, and made a part of, the grade designation, the word "Weevily."

DEFINITIONS

Basis of Grade Determinations.—Each determination of class, variety, damage, and heat damage, shall be upon the basis of the grain after the removal of the cracked corn and foreign material. All other determinations shall be upon the basis of the grain as a whole.

Percentages.—Percentages, except in the case of moisture, shall be percentages ascertained by weight.

Percentage of Moisture.—Percentage of moisture shall be that ascertained by the water oven and the method of use thereof described in Service and Regulatory Announcements No. 147, of the Bureau of Agricultural Economics, of the United States Department of Agriculture, or ascertained by any device and method which give equivalent results in the determination of moisture.

Test Weight per Bushel.—Test weight per bushel shall be the weight per Winchester bushel as determined by the testing apparatus and the method of use thereof described in Bulletin No. 1065, dated May 18, 1923, issued by the United States Department of Agriculture, or as determined by any device and method which give equivalent results in the determination of test weight per bushel.

Cracked Corn and Foreign Material.—Cracked corn and foreign material shall include kernels and pieces of kernels of corn and all matter other than corn which will pass through a No. 12 sieve, and all matter other than corn remaining on such sieve after screening.

No. 12 Sieve.—A metal sieve perforated with round holes 12/64 inch in diameter.

Other Grains.—Other grains shall include wheat, rye, oats, grain sorghums, barley, hull-less barley, flaxseed, emmer, spelt, einkorn, Polish wheat, poulard wheat, cultivated buckwheat, sweet corn, popcorn and soybeans.

Damaged Kernels—Damaged kernels shall be kernels and pieces of kernels of corn which are heat damaged, sprouted, frosted, badly ground damaged, badly weather damaged, or otherwise materially damaged.

Heat - Damaged Kernels.—Heat - damaged kernels shall be kernels and pieces of kernels of corn which have been materially discolored and damaged by external heat or as a result of heating caused by fermentation.

CORN—GRADE REQUIREMENTS FOR YELLOW CORN, WHITE CORN, AND MIXED CORN

	Grade No.				
	1	2	3	4	5
Minimum test weight, per bu, lbs	54	53	51	48	44
Maximum limits of—Moisture, %	14	15.5	17.5	20	23
Cracked corn and foreign material, %	2	3	4	5	7
Damaged kernels—					
Total, %	3	5	7	10	15
Heat damaged, %	0.1	0.2	0.5	1	3

Sample Grade.—Sample grade shall include corn of the class yellow corn, or white corn, or mixed corn, which does not come within the requirements of any of the grades from No. 1 to No. 5, inclusive; or which contains stones and/or cinders; or which is musty, or sour, or heating, or hot; or which has any commercially objectionable foreign odor; or which is otherwise of distinctly low quality.

U. S. STANDARDS FOR WHEAT

United States grain standards, promulgated by the Department of Agriculture, are as follows:

Wheat.—Wheat shall be any grain which, before the removal of dockage, consists of 50% or more of wheat and not more than 10% of other grains for which standards have been established under the provisions of the United States Grain Standards Act, and which, after the removal of dockage, contains not more than 50% of broken kernels of grain of any size. The term wheat in these standards shall not include emmer, spelt, einkorn, Polish wheat and poulard wheat.

(The specifications of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug and Cosmetic Act.)

Classes.—Wheat shall be divided into seven classes, as follows: Class I, hard red spring wheat; Class II, durum wheat; Class III, red durum wheat; Class IV, hard red winter wheat; Class V, soft red winter wheat; Class VI, white wheat; and Class VII, mixed wheat.

Grades.—Wheat shall be graded and designated according to the respective grade requirements of the numerical grades and sample grade of its appropriate class or subclass, and according to the special grades when applicable.

HARD RED SPRING WHEAT (CLASS I)

This class shall include all varieties of hard red spring wheat, and may include not more than 10% of wheats of other classes. This class shall be divided into three subclasses, as follows:

Subclass (A) Dark Northern Spring

This subclass shall include wheat of the class hard red spring wheat, consisting of 75% or more of dark, hard and vitreous kernels. This subclass shall not include more than 10% of wheat of the variety Humpback.

Subclass (B) Northern Spring

This subclass shall include wheat of the class hard red spring wheat, consisting of more than 25% but less than 75% of dark, hard and vitreous kernels. This subclass shall not include more than 10% of wheat of the variety Humpback.

Subclass (C) Red Spring

This subclass shall include wheat of the class hard red spring wheat, consisting of not more than 25% of dark, hard, and vitreous kernels. This subclass shall also include wheat of the class hard red spring wheat consisting of more than 10% of the variety Humpback.

DURUM WHEAT (CLASS II)

This class shall include all varieties of common durum wheat, and may include not more than 10% of wheats of other classes. This class shall be divided into three subclasses, as follows:

Subclass (A) Hard Amber Durum

This subclass shall include wheat of the class durum wheat, consisting of 75% or more of hard and vitreous kernels of amber color.

Subclass (B) Amber Durum

This subclass shall include wheat of the class durum wheat, consisting of 50% or more but less than 75% of hard and vitreous kernels of amber color.

Subclass (C) Durum

This subclass shall include wheat of the class durum wheat, consisting of less than 50% of hard and vitreous kernels of amber color.

RED DURUM WHEAT (CLASS III)

This class shall include all varieties of

red durum wheat, and may include not more than 10% of wheats of other classes.

HARD RED WINTER WHEAT (CLASS IV)

This class shall include all varieties of hard red winter wheat, and may include not more than 10% of wheats of other classes. This class shall be divided into three subclasses, as follows:

Subclass (A) Dark Hard Winter

This subclass shall include wheat of the class hard red winter wheat consisting of 75% or more of dark, hard and vitreous kernels.

Subclass (B) Hard Winter

This subclass shall include wheat of the class hard red winter wheat consisting of more than 25% but less than 75% of dark, hard and vitreous kernels.

Subclass (C) Yellow Hard Winter

This subclass shall include wheat of the class hard red winter wheat consisting of not more than 25% of dark, hard and vitreous kernels.

SOFT RED WINTER WHEAT (CLASS V)

This class shall include all varieties of soft red winter wheat and may include not more than 10% of wheats of other classes. This class shall be divided into two subclasses, as follows:

Subclass (A) Red Winter

This subclass shall include wheat of the class soft red winter wheat consisting of both light and dark colored kernels. This subclass shall not include more than 10% of soft red winter wheat grown west of the Great Plains area of the United States.

Subclass (B) Western Red

This subclass shall include wheat of the class soft red winter wheat, consisting of more than 10% of wheat of this class grown west of the Great Plains area of the United States.

WHITE WHEAT (CLASS VI)

This class shall include all varieties of white wheat, whether winter or spring grown, and may include not more than 10% of wheats of other classes. This class shall be divided into four subclasses, as follows:

Subclass (A) Hard White

This subclass shall include all wheat of the class white wheat consisting of 75% or more of hard (not soft and chalky) kernels. This subclass shall not include more than 10% of Sonora wheat or wheat of the white club varieties, either singly or in any combination.

Subclass (B) Soft White

This subclass shall include wheat of the class white wheat consisting of less than 75% of hard (not soft and chalky) kernels. This subclass shall not include more than 10% of Sonora wheat or wheat of the white club varieties, either singly or in any combination.

Subclass (C) White Club

This subclass shall include wheat of the class white wheat consisting of Sonora wheat or wheat of the white club varieties, either singly or in any combination. This subclass shall not include more than 10% of common white wheat other than Sonora, either singly or in any combination.

Subclass (D) Western White

This subclass shall include wheat of the class white wheat, which contains more than 10% of Sonora wheat or wheat of the white club varieties, either singly or in any combination, and which also contains more than 10% of common white wheat other than Sonora.

MIXED WHEAT (CLASS VII)

This class shall include all mixtures of wheat not provided for in the classes from I to VI, inclusive.

Grade Requirements and Designations.—Mixed wheat shall be graded according to the numerical and sample grade requirements of the class of wheat which predominates in the mixture, except that the grade specifications for the factor "wheats of other classes" and the grade specifications for "No. 1 heavy" in the standards for hard red spring wheat, shall be disregarded.

The grade designation for mixed wheat shall be stated as provided in paragraph (a), (b) or (c) of this section:

(a) Except as specified in paragraphs (b) and (c) of this section, the grade designation for mixed wheat shall include successively, in the order named, (1) the number of the grade or the words "sample grade," as the case may be, (2) the words "mixed wheat," and (3) the name and approximate percentage of each class of wheat which constitutes more than 10% of the mixture in the order of its predominance; but if only one class exceeds 10% of the mixture, the name and approximate percentage of that class shall be included in the grade designation, followed by the name and approximate percentage of at least one other class.

(b) Amber Mixed Durum.—Amber mixed durum shall be mixed wheat consisting of a mixture of durum and other wheats, which contains not more than a total of 15% of wheats other than common durum and which contains not less than 60% of durum kernels that are hard and vitreous and of amber color. Amber mixed durum may contain not more than 5% of red durum, white and soft red winter wheat, singly or combined.

The grade designation for amber mixed durum shall include successively, in the order named, (1) the number of the grade or the words "sample grade," as the case may be, and (2) the words "amber mixed durum."

(c) Mixed Durum.—Mixed durum shall be mixed wheat consisting of a mixture of durum and other wheats, which contains not more than a total of 20% of wheats other than common durum. Mixed durum may contain not more than 5% of red durum wheat, and may contain not more than 5% of white and soft red winter wheats, singly or combined.

The grade designation for mixed durum shall include successively, in the order named, (1) the number of the grade or the words "sample grade," as the case may be, and (2) the words "mixed durum."

DOCKAGE

Dockage includes weed seeds, weed stems, chaff, straw, grain other than wheat, sand dirt and any other foreign material, which can be removed readily from the wheat by the use of appropriate sieves and cleaning devices; also undeveloped, shriveled and small pieces of wheat kernels removed in properly separating the foreign material, and which cannot be recovered by properly rescreening or recleaning.

The quantity of dockage shall be calculated in terms of percentage based on the total weight of the grain including the dockage. The percentage of dockage so calculated, when equal to 1% or more, shall be stated in terms of whole per cent, and when less than 1% shall not be stated. A fraction of a per cent shall be disregarded. The word "dockage," together with the percentage thereof, shall be added to the grade designation.

SPECIAL GRADES FOR WHEAT

Tough Wheat

Definition.—Tough wheat shall be (a) wheat of any of the classes hard red winter wheat, soft red winter wheat, or white wheat, or of the class mixed wheat in which wheat of any one of the classes hard red winter wheat, or soft red winter wheat, or white wheat, predominates, which contains more than 14% but not more than 15.5% of moisture, and (b) wheat of any of the classes hard red spring wheat, or durum wheat, or red durum wheat, or of the class mixed wheat, in which wheat of any one of the classes hard red spring wheat, or durum wheat, or red durum wheat, predominates, which contains more than 14.5% but not more than 16% of moisture.

Grades.—Tough wheat shall be graded and designated according to the grade requirements of the standards applicable to such wheat if it were not tough, and there shall be added to, and made a part of, the grade designation, the word "Tough."

Smutty Wheat

Definition.—Smutty wheat shall be wheat which has an unmistakable odor of smut, or which contains balls, portions of balls, or spores, of smut, in excess of a quantity equal to 14 balls of average size in 250 grams of wheat.

Smutty wheat shall be graded and designated according to the method described either in paragraph (a) or paragraph (b) of this section.

(a) Smut Dockage.—Before the determination of smut dockage as provided in this paragraph, the wheat shall be graded and designated according to the grade requirements of the standards applicable to such wheat if it were not smutty. The smut shall be removed by scouring and the loss in weight of the wheat caused by the removal of the smut shall be calculated in terms of percentage based on the total weight of the grain when free from dockage. The percentage so calculated shall be stated in terms of half per cent, whole per cent, or whole and half per cent, as the case may be. A fraction of a half per cent shall be disregarded. The percentage of the smut dockage, so calculated and stated, shall be added to the grade designation, preceding the statement of dockage, if any.

(b) "Light Smutty" and "Smutty."—Smutty wheat shall be graded and designated according to the grade requirements of the standards applicable to such wheat if it were not smutty; and

(1) In the case of smutty wheat which has an unmistakable odor of smut, or which contains balls, portions of balls, or spores, of smut, in excess of a quantity equal to 14 balls but not in excess of a quantity equal to 30 balls of average size in 250 grams of wheat, there shall be added to, and made a part of, the grade designation, the words "light smutty," and

(2) In the case of smutty wheat which contains balls, portions of balls, or spores, of smut, in excess of a quantity equal to 30 balls of average size in 250 grams of wheat, there shall be added to, and made a part of, the grade designation, the word "smutty."

Garlicky Wheat

Definition.—Garlicky wheat shall be wheat which contains two or more green garlic bulblets, or an equivalent quantity of dry or partly dry bulblets, in 1,000 grams of wheat.

Grades.—Garlicky wheat shall be graded and designated according to the grade requirements of the standards applicable to such wheat if it were not garlicky; and

(1) In the case of garlicky wheat which contains two or more but not more than six green garlic bulblets, or an equivalent quantity of dry or partly dry bulblets, in 1,000 grams of wheat, there shall be added to, and made a part of, the grade designation, the words "light garlicky," and

(2) In the case of garlicky wheat which contains more than six green garlic bulblets, or an equivalent quantity of dry or partly dry bulblets, in 1,000 grams of wheat, there shall be added to, and made a part of, the grade designation, the word "garlicky."

Weevily Wheat

Definition.—Weevily wheat shall be wheat which is infested with live weevils or other insects injurious to stored grain.

Grades.—Weevily wheat shall be graded and designated according to the grade requirements of the standards applicable to such wheat if it were not weevily, and there shall be added to, and made a part of, the grade designation, the word "weevily."

Ergoty Wheat

Definition.—Ergoty wheat shall be wheat which contains ergot in excess of 0.3%.

Grades.—Ergoty wheat shall be graded and designated according to the grade requirements of the standards applicable to such wheat if it were not ergoty, and there shall be added to, and made a part of, the grade designation, the word "Ergoty."

Treated Wheat

Definition.—Treated wheat shall be wheat which has been scoured, limed, washed, sulphured, or treated in such a manner that its true quality is not reflected by either the numerical grade or the sample grade designation, alone.

Grades.—Treated wheat shall be graded and designated according to the grade requirements of the standards applicable to such wheat if it were not treated, and there shall be added to, and made a part of, the grade designation, a statement indicating the kind of treatment.

DEFINITIONS

Basis of Grade Determinations.—Each determination of dockage, temperature, odor, garlic and live weevils or other insects injurious to stored grain, shall be upon the basis of the grain as a whole. All other determinations shall be upon the basis of the grain when free from dockage.

Percentages.—Percentages, except in the case of moisture, shall be percentages ascertained by weight.

Percentage of moisture.—Percentage of moisture shall be that ascertained by the air oven and the method of use thereof described in Service and Regulatory Announcements No. 147 of the Bureau of Agricultural Economics of the United States Department of Agriculture, or ascertained by any device and method which give equivalent results in the determination of moisture.

Test Weight per Bushel.—Test weight per bushel shall be the weight per Winchester bushel as determined by the testing apparatus and the method of use thereof described in Bulletin No. 1065, dated May 18, 1922, issued by the United States Department of Agriculture, or as determined by any device and method which give equivalent results in the determination of test weight per bushel.

Foreign Material.—Foreign material shall include all matter other than wheat which is not separated from the wheat in the proper determination of dockage, except that smut balls shall not be considered as foreign material.

Other Grains.—Other grains shall include rye, oats, corn, grain sorghums, barley, hulless barley, flaxseed, emmer, spelt, einkorn, Polish wheat, poulard wheat, cultivated buckwheat, and soy beans.

Damaged Kernels.—Damaged kernels shall be kernels and pieces of kernels of wheat and other grains which are heat damaged, sprouted, frosted, badly ground damaged, badly weather damaged, or otherwise materially damaged.

Heat - Damaged Kernels.—Heat - damaged kernels shall be kernels and pieces of kernels of wheat and other grains which have been materially discolored and damaged by external heat or as a result of heating caused by fermentation.

CLASS I—HARD RED SPRING WHEAT

Grade requirements for (a) dark northern spring, (b) northern spring, (c) red spring.

	Grade No.					
	†*1 heavy	†1	†2	3	4	5
Minimum test weight per bu, lbs.	60	58	57	55	53	50
Maximum limits of—						
Damaged kernels (wheat and other grains)—Total, %.	2	2	4	7	10	15
Heat-damaged, %	0.1	0.1	0.2	0.5	1.0	3.0
Foreign material—Total, %	1	1	2	3	5	7
Matter except other grains, %	0.5	0.5	1.0	2.0	3.0	5.0
Wheats of other classes—Total, %	5	5	10	10	10	10
Durum and/or red durum, %	2	2	3	5	10	10

Sample Grade.—Sample grade shall include wheat of the subclass dark northern spring, or northern spring, or red spring, which does not come within the requirements of any of the grades from No. 1 heavy to No. 5, inclusive; or which contains more than 16% of moisture; or which contains inseparable stones and/or cinders; or which is musty, or sour, or heating, or hot; or which has any commercially objectionable foreign odor except of smut or garlic; or which contains a quantity of smut so great that any one or more of the grade requirements cannot be applied accurately; or which is otherwise of distinctly low quality.

*Applies to each of the subclasses dark northern spring, northern spring and red spring.

†The wheat in grades No. 1 heavy and No. 1 of this class may contain not more than 7%, and the wheat in grade No. 2 of this class may contain not more than 10%, of shrunken and/or broken kernels of grain and other matter that will pass through a 20-gage metal sieve with slotted perforations 0.064 inch wide by ⅝ inch long.

CLASS II—DURUM WHEAT, AND CLASS III, RED DURUM WHEAT

Grade requirements for the subclasses (a) hard amber durum, (b) amber durum, and (c) durum, of the class durum wheat, and for the class red durum wheat.

	Grade No.				
	‡1	‡2	‡3	4	5
Minimum test weight per bushel, pounds	60	58	56	54	51
Maximum limits of—					
Damaged kernels (wheat and other grains)—Total, %	2	4	7	10	15
Heat damaged, %	0.1	0.2	0.5	1.0	3.0
Foreign material—Total, %	1	2	3	5	7
Matter except other grains, %	0.5	1.0	2.0	3.0	5.0
Wheats of other classes—Total, %	†5	10	10	10	10
Soft red winter, white and red durum, singly or combined*, %	3	5	10	10	10

Sample Grade.—Sample grade shall include wheat of the subclass hard amber durum, or amber durum, or durum, or wheat of the class red durum wheat, which does not come within the requirements of any of the grades from No. 1 to No. 5, inclusive; or which contains more than 16% moisture; or which contains inseparable stones and/or cinders; or which is musty, or sour, or heating, or hot; or which has any commercially objectionable foreign odor except of smut or garlic; or which contains a quantity of smut so great that any one or more of the grade requirements cannot be applied accurately; or which is otherwise of distinctly low quality.

*These specifications do not apply to the class red durum wheat, or to the subclass durum. †No. 1 red durum may contain 10% of wheats of other classes.

‡The wheat in grades No. 1 and No. 2 of each of these classes may contain not more than either (a) 7% of shrunken and/or broken kernels of grain and other matter that will pass through a 20-gage metal sieve with slotted perforations 0.064 in wide by ⅝ in long, or (b) 10% of all such material that will pass through said sieve together with broken kernels of grain of any size which remain on said sieve; and the wheat in grade No. 3 of each of these classes may contain not more than either (a) 10% of shrunken and/or broken kernels of grain and other matter that will pass through said sieve, or (b) 15% of all such material that will pass through said sieve together with the broken kernels of grain of any size which remain on said sieve.

CLASS IV—HARD RED WINTER WHEAT

Grade requirements for (a) dark hard winter, (b) hard winter, (c) yellow hard winter.

	Grade No.				
	*1	*2	*3	4	5
Minimum test weight per bu, lbs.	60	58	56	54	51
Maximum limits of—					
Damaged kernels (wheat and other grains)—Total, %	2	4	7	10	15
Heat damaged, %	0.1	0.2	0.5	1.0	3.0
Foreign material—Total, %	1	2	3	5	7
Matter except other grains, %	0.5	1.0	2.0	3.0	5.0
Wheats of other classes—Total, %	5	10	10	10	10
Durum and/or red durum, %	1	2	3	10	10

Sample Grade.—Sample grade shall include wheat of the subclass dark hard winter, or hard winter, or yellow hard winter, which does not come within the requirements of any of the grades from No. 1 to No. 5, inclusive; or which contains more than 15.5% of moisture; or which contains inseparable stones and/or cinders; or which is musty, or sour, or heating, or hot; or which has any commercially objectionable foreign odor except of smut or garlic; or which contains a quantity of smut so great that any one or more of the grade requirements cannot be applied accurately; or which is otherwise of distinctly low quality.

*The wheat in grades No. 1 and No. 2 of this class may contain not more than 7%, and the wheat in grade No. 3 of this class may contain not more than 10%, of shrunken and/or broken kernels of grain and other matter that will pass through a 20-gage metal sieve with slotted perforations 0.064 inch wide by ⅝ inch long.

CLASS V—SOFT RED WINTER WHEAT

Grade requirements for (a) red winter, (b) western red.

	Grade No.				
	*1	*2	*3	4	5
Minimum test weight per bu, lbs	60	58	56	54	51
Maximum limits of—					
Damaged kernels (wheat and other grains)—Total, %	2	4	7	10	15
Heat damaged, %	0.1	0.2	0.5	1.0	3.0
Foreign material—Total, %	1	2	3	5	7
Matter except other grains, %	0.5	1.0	2.0	3.0	5.0
Wheats of other classes—Total, %	5	10	10	10	10
Durum and/or red durum, %	0.5	1.0	2.0	10.0	10.0

Sample Grade.—Sample grade shall include wheat of the subclass red winter, or western red, which does not come within the requirements of any of the grades from No. 1 to No. 5, inclusive; or which contains more than 15.5% of moisture; or which contains inseparable stones and/or cinders; or which is musty, or sour, or heating, or hot; or which has any commercially objectionable foreign odor except of smut or garlic; or which contains a quantity of smut so great that any one or more of the grade requirements cannot be applied accurately; or which is otherwise of distinctly low quality.

*The wheat in grades No. 1 and No. 2 of this class may contain not more than 7%, and the wheat in grade No. 3 of this class may contain not more than 10%, of shrunken and/or broken kernels of grain and other matter that will pass through a 20-gage metal sieve with slotted perforations 0.064 inch wide by ⅝ inch long.

CLASS VI—WHITE WHEAT

Grade requirements for (a) hard white, (b) soft white, (c) white club, (d) western white.

	Grade No.				
	*1	*2	*3	4	5
Minimum test weight per bu, lbs	60	58	56	54	51
Maximum limits of—					
Damaged kernels (wheat and other grains)—Total, %	2	4	7	10	15
Heat damaged, %	0.1	0.2	0.5	1.0	3.0
Foreign material—Total, %	1	2	3	5	7
Matter except other grains, %	0.5	1.0	2.0	3.0	5.0
Wheats of other classes—Total, %	5	10	10	10	10
Durum and/or red durum, %	0.5	1.0	2.0	10.0	10.0

Sample Grade.—Sample grade shall include wheat of the subclass hard white, or soft white, or white club, or western white, which does not come within the requirements of any of the grades from No. 1 to No. 5, inclusive; or which contains more than 15.5% of moisture; or which contains inseparable stones and/or cinders; or which is musty, or sour, or heating, or hot; or which has any commercially objectionable foreign odor except of smut or garlic; or which contains a quantity of smut so great that any one or more of the grade requirements cannot be applied accurately; or which is otherwise of distinctly low quality.

*The wheat in grades No. 1 and No. 2 of this class may contain not more than 7%, and the wheat in grade No. 3 of this class may contain not more than 10%, of shrunken and/or broken kernels of grain and other matter that will pass through a 20-gage metal sieve with slotted perforations 0.064 inch wide by ⅝ inch long.

GRADES OF GRAIN, FLAXSEED, SOYBEANS AND MILLFEEDS DELIVERABLE ON CONTRACTS FOR FUTURE DELIVERY

The following information has been prepared by the Commodity Exchange Administration as a means of easy reference to the deliverable grades of grain, flaxseed, soybeans and millfeeds that may be tendered on futures contracts on the various markets licensed under the Commodity Exchange Act.

At the present time futures trading is conducted in one or more of the commodities—wheat, corn, oats, rye, barley, flaxseed, soybeans and millfeeds—on 11 "contract markets": Board of Trade of the City of Chicago, Chicago Open Board of Trade, Duluth Board of Trade, Board of Trade of Kansas City, Mo., Los Angeles Grain Exchange, Milwaukee Grain & Stock Exchange, Chamber of Commerce of Minneapolis, Portland Grain Exchange, San Francisco Grain Exchange, Seattle Grain Exchange, Merchants' Exchange of St. Louis.

As a matter of convenience the grades of grain deliverable on Winnipeg Grain Exchange contracts are also listed, although trading on that market is not subject to the provisions of the Commodity Exchange Act.

Although trading in grain and flaxseed contracts may be conducted for delivery in each calendar month, it is largely confined to contracts calling for delivery in May, July, September and December, which are called the "major" futures.

Trading in millfeed contracts is conducted for delivery in each month throughout the year.

The units of trading in futures contracts for grain, flaxseed and soybeans on all markets included herein are lots of 5,000 bus (round lots) and 1,000 bus (job lots), or both, with these exceptions: the job lot unit of trade in oats contracts at Chicago is 2,000 bus in order to successfully hedge carloads, and the unit of trading in contracts at Los Angeles and San Francisco is 100 tons.

The units of trading in millfeeds for future delivery are 100 tons in round lots and 25 tons in job lots.

Effective after May, 1938, by order of the Secretary of Agriculture under the Commodity Exchange Act dated Feb. 17, 1938, a period of seven business days is required during which contracts for future delivery in the current delivery month of wheat, corn, oats, rye, barley or flaxseed may be settled by delivery of the actual cash commodity after trading in such contracts has ceased. The (*) indicates contract grades that are generally understood as basic and in some markets are definitely so designated.

Board of Trade of the City of Chicago

Deliverable grades of wheat, corn, oats, rye, barley and soybeans:

WHEAT

Deliverable at premium, 1½c per bu: No. 1 dark hard winter wheat.

Deliverable at premium, 1c per bu: No. 1 dark northern spring wheat, No. 1 heavy dark northern spring wheat.

Deliverable at premium, ½c per bu: No. 2 dark hard winter wheat.

Deliverable at contract price: No. 1 hard winter wheat, *No. 2 hard winter wheat, No. 1 yellow hard winter wheat, No. 2 yellow hard winter wheat, No. 1 red winter wheat, *No. 2 red winter wheat, No. 1 northern spring wheat, No. 1 heavy northern spring wheat.

CORN

Deliverable at premium, ½c per bu: No. 1 white corn, No. 2 white, No. 1 yellow, No. 2 yellow.

Deliverable at contract price: No. 1 mixed corn, *No. 2 mixed.

Deliverable at discount, 2c per bu: No. 3 white corn, No. 3 yellow.

Deliverable at discount, 2½c per bu: No. 3 mixed corn.

OATS†

†Contracts maturing on and after Oct. 1, 1941, special red oats are deliverable at the premiums and discounts shown for white oats of the same numerical grade.

Deliverable at premium, 1c per bu: No. 1 extra heavy bright white oats, No. 1 extra heavy white.

Deliverable at premium, ¾c per bu: No. 1 heavy bright white oats, No. 1 heavy white.

Deliverable at premium, ½c per bu: No. 1 bright white oats, No. 1 white, No. 2 extra heavy bright white, No. 2 extra heavy white.

Deliverable at premium, ¼c per bu: No. 2 heavy bright white oats, No. 2 heavy white.

Deliverable at contract price: No. 2 bright white oats, *No. 2 white.

Deliverable at discount, 1c per bu: No. 3 extra heavy bright white oats, No. 3 extra heavy white.

Deliverable at discount, 1¼c per bu: No. 3 heavy bright white oats, No. 3 heavy white.

Deliverable at discount, 1½c per bu: No. 3 bright white oats, No. 3 white.

RYE

For delivery on all contracts maturing on and after Oct. 1, 1941. Grades conform to the revised official standards, which became effective July 1, 1941.

Deliverable at contract price: *No. 2 rye.

Deliverable at premium, 5c per bu: No. 1 plump rye.

Deliverable at premium, 2½c bu: No. 2 plump rye.

Deliverable at premium, 1c bu: No. 1 rye.

BARLEY

Deliverable at premium, 3c per bu: No. 1 malting barley (subclass A of class 1).

Deliverable at premium, 2c per bu: No. 1 barley (class 1).

Deliverable at contract price: No. 2 malting barley (subclass A of class 1), No. 2 (class 1).

Deliverable at discount, 4c per bu: No. 3 barley (class 1).

MALTING BARLEY

Deliverable at premium, 3c per bu: No. 1 malting barley (subclass A of class 1).

Deliverable at contract price: No. 2 malting barley (subclass A of class 1).

SOYBEANS†

†Official standards for soybeans revised effective Sept. 1, 1941 (promulgated May 31, 1941). Grade designations were not changed. Grades conforming to standards in effect prior to Sept. 1, 1941, are deliverable on "old" contracts maturing prior to Nov. 1, 1941, which contracts may be traded in for liquidation only on and after Sept. 1, 1941. Grades conforming to revised standards are deliverable on the new October and on all contracts maturing after Oct. 31, 1941.

Deliverable at contract price: No. 1 yellow soybeans, No. 2 yellow.

Deliverable at discount, 2c per bu: No. 3 yellow soybeans.

The Chicago Open Board of Trade

Deliverable grades of wheat, corn, oats, rye and soybeans:

Contracts for wheat, corn, oats, rye and soybeans are traded in on the Chicago Open Board and the grades of each which may be tendered on delivery are the same as for the Chicago Board of Trade, as provided in rule 516 of the constitution and rules of the Chicago Open Board of Trade, which reads as follows:

"The grade, quality and weight of grain deliverable upon exchange contracts shall be determined according to the rules and regulations of the Board of Trade of the City of Chicago as they now exist, or as they may be modified hereafter. All such rules and regulations relative to grading, inspection, classification and weighing of grain and deliveries of other than contract grade at specified price differences, are hereby adopted and made applicable to contracts of members of this association."

Board of Trade of Kansas City, Mo.

Deliverable grades of wheat, corn and oats‡:

WHEAT

Deliverable at contract price: No. 2 dark hard winter wheat, *No. 2 hard winter, No. 2 yellow hard winter, No. 2 red winter.

Deliverable at premium, 1c per bu: No. 1 dark hard winter wheat, No. 1 hard winter, No. 1 yellow hard winter, No. 1 red winter.

Deliverable at discount, 3c per bu: No. 3 dark hard winter wheat, No. 3 hard winter, No. 3 yellow hard winter, No. 3 red winter.

‡For information on millfeeds see "Millfeeds."

CORN

Deliverable at contract price: No. 1 mixed corn, No. 1 white, No. 1 yellow, *No. 2 mixed, No. 2 white, No. 2 yellow.

Deliverable at discount, 2½c per bu: No. 3 mixed corn, No. 3 white, No. 3 yellow.

OATS

Deliverable at premium, ½c per bu: No. 1 white oats, No. 2 white, No. 1 red, *No. 2 red, No. 1 special red, No. 2 special red.

Deliverable at contract price: *No. 3 white oats, No. 3 red, No. 3 special red, No. 2 mixed.

Deliverable at a discount of ½c bu: No. 3 mixed.

Deliveries of the foregoing grades (all grains) may be made in such proportions as may be convenient to the seller, subject, however, to the provisions of rule 255, rule 323 and chapter XXI of the constitution, rules and regulations of the Board of Trade of the City of Kansas City, Mo.

Chamber of Commerce of Minneapolis

Deliverable grades of wheat, corn, oats, rye, barley and flaxseed:

Warehouse receipts for certain elevators in Duluth, Minn., and Superior, Wis., which have been declared regular by the board of directors of the Chamber of Commerce of Minneapolis, may be delivered upon Minneapolis spring wheat, oats, rye, barley and corn futures at the Minneapolis contract bases, and upon Minneapolis flaxseed futures at ½c per bu discount under the Minneapolis contract basis.

WHEAT

Deliverable at premium, 2c per bu: No. 1 heavy dark northern spring wheat.

Deliverable at premium, 1c per bu: No. 1 dark northern spring wheat, No. 1 heavy northern spring.

Deliverable at contract price: *No. 1 northern spring wheat.

Deliverable at discount, 2c per bu: No. 2 dark northern spring wheat.

Deliverable at discount, 3c per bu: No. 2 northern spring wheat.

CORN

Deliverable at contract price: No. 1 yellow corn, *No. 2 yellow.

Deliverable at discount, 2½c per bu: No. 3 yellow corn.

OATS

Applicable to all futures maturing prior to September, 1942.

Deliverable at premium, ½c per bu: No. 1 white oats, No. 1 bright white, No. 1 heavy white, No. 1 extra heavy white, No. 1 heavy bright white, No. 1 extra heavy bright white.

Deliverable at contract price: *No. 2 white oats, No. 2 bright white, No. 2 heavy white, No. 2 extra heavy white, No. 2 heavy bright white, No. 2 extra heavy bright white.

Deliverable at discount, 1½c per bu: No. 3 white oats, No. 3 bright white, No. 3 heavy white, No. 3 extra heavy white, No. 3 heavy bright white, No. 3 extra heavy bright white.

Applicable as of Dec. 1, 1941, to September, 1942, and subsequent futures.

Deliverable at premium, ½c bu: No. 1 white, No. 1 bright white, No. 1 heavy white, No. 1 extra heavy white, No. 1 heavy bright white, No. 1 extra heavy bright white, No. 2 heavy white, No. 2 extra heavy white, No. 2 heavy bright white, No. 2 extra heavy bright white.

Deliverable at contract price: *No. 2 white, No. 2 bright white.

Deliverable at a discount of ½c bu: No. 3 heavy white, No. 3 extra heavy white, No. 3 heavy bright white, No. 3 extra heavy bright white.

Deliverable at a discount of 1c bu: No. 3 white, No. 3 bright white.

RYE

Deliverable at premium, 2c bu: No. 1 plump, No. 2 plump.

Deliverable at contract price: No. 1, *No. 2 and No. 3 plump.

Deliverable at discount, 3c bu: No. 3.

FEED BARLEY

Deliverable at contract price: No. 1 barley, *No. 2 barley, No. 1 malting barley, No. 2 malting barley.

Deliverable at discount of 2c bu: No. 3 barley.

MALTING BARLEY

Deliverable at contract price: No. 1 malting barley, *No. 2 malting barley.

FLAXSEED

Applicable to all futures maturing prior to September, 1942.

Deliverable at contract price: *No. 1 flaxseed.

Deliverable at penalty of 2% of the contract price: No. 2 flaxseed.

Applicable as of Dec. 1, 1941, to September, 1942, and subsequent futures.

Deliverable at contract price: *No. 1 flaxseed.

Deliverable at penalty of 3½c bu: No. 2 flaxseed.

Duluth Board of Trade

Deliverable grades of durum wheat, spring wheat, rye, barley and flaxseed:

DURUM WHEAT

Duluth is the only market on which futures trading is conducted in durum wheat. Practically all transactions in wheat futures at Duluth are in durum wheat.

Deliverable at premium, 2c per bu: Nos. 1 and 2 hard amber durum wheat.

Deliverable at contract price: Nos. 1 and 2 amber durum wheat.

Deliverable at discount, 2c per bu: Nos. 1 and 2 amber mixed durum wheat, No. 3 hard amber durum.

Deliverable at discount, 3c per bu: Nos. 1 and 2 durum wheat.

Deliverable at discount, 4c per bu: Nos. 1 and 2 mixed durum wheat, No. 3 amber durum.

SPRING WHEAT

Deliverable at premium, 2c per bu: No. 1 heavy dark northern spring wheat.

Deliverable at premium, 1c per bu: No. 1 dark northern spring wheat, No. 1 heavy northern spring.

Deliverable at contract price: *No. 1 northern spring wheat.

Deliverable at discount, 2c per bu: No. 2 dark northern spring wheat.

Deliverable at discount, 3c per bu: No. 2 northern spring wheat.

RYE

Deliverable at premium of 5c bu: No. 1 plump rye.

Deliverable at premium of 2½c bu: No. 2 plump rye.

Deliverable at contract price: No. 2 rye and No. 3 plump rye.

Deliverable at discount of 3c bu: No. 3 rye.

FEED BARLEY

Deliverable at premium, 2c per bu: No. 1 barley.

Deliverable at contract price: *No. 2 barley.

Deliverable at discount, 4c per bu: No. 3 barley.

MALTING BARLEY

Deliverable at premium, 3c per bu: No. 1 malting barley.

Deliverable at contract price: *No. 2 malting barley.

FLAXSEED

*No. 1 flaxseed, contract grade. Any flaxseed, wherever grown, that shall be graded No. 1 shall be deliverable at the contract price.

No. 2 flaxseed, wherever grown, shall be deliverable at 3½c under the contract price.

Milwaukee Grain and Stock Exchange

Deliverable grades of wheat, corn, oats, rye and barley:

WHEAT

Deliverable at premium, 1½c per bu: No. 1 dark hard winter wheat.

Deliverable at premium, 1c per bu: No. 1 dark northern spring wheat, No. 1 heavy dark northern spring.

Deliverable at premium, ½c per bu: No. 2 dark hard winter wheat.

Deliverable at contract price: No. 1 hard winter wheat, *No. 2 hard winter, No. 1 yellow hard winter, No. 2 yellow hard winter, No. 1 red winter, *No. 2 red winter, No. 1 northern spring, No. 1 heavy northern spring.

CORN

Deliverable at premium, ½c per bu: No. 1 white corn, No. 2 white, No. 1 yellow, No. 2 yellow.

Deliverable at contract price: No. 1 mixed corn, *No. 2 mixed.

Deliverable at discount, 2c per bu: No. 3 white corn, No. 3 yellow.

Deliverable at discount, 2½c per bu: No. 3 mixed corn.

OATS†

†Contracts maturing on and after Oct. 1, 1941, special red oats are deliverable at the premiums and discounts shown for white oats of the same numerical grade.

Deliverable at premium, 1c per bu: No. 1 extra heavy bright white oats, No. 1 extra heavy white.

Deliverable at premium, ¾c per bu: No. 1 heavy bright white oats, No. 1 heavy white.

Deliverable at premium, ½c per bu: No. 1 bright white oats, No. 1 white, No. 2 extra heavy bright white, No. 2 extra heavy white.

Deliverable at premium, ¼c per bu: No. 2 heavy bright white oats, No. 2 heavy white.

Deliverable at contract price: No. 2 bright white oats, *No. 2 white.

Deliverable at discount, 1c per bu: No. 3 extra heavy bright white oats, No. 3 extra heavy white.

Deliverable at discount, 1¼c per bu: No. 3 heavy bright white oats, No. 3 heavy white.

Deliverable at discount, 1½c per bu: No. 3 bright white oats, No. 3 white.

RYE

For delivery on all contracts maturing on and after Oct. 1, 1941. Grades conform to the revised official standards, which became effective July 1, 1941.

Deliverable at contract price: *No. 2 rye.

Deliverable at premium, 5c bu: No. 1 plump rye.

Deliverable at premium, 2½c bu: No. 2 plump rye.

Deliverable at premium, 1c bu: No. 1 rye.

BARLEY

Deliverable at premium, 3c per bu: No. 1 malting barley (subclass A of class 1).

Deliverable at premium, 2c per bu: No. 1 barley (class 1).

Deliverable at contract price: No. 2 malting barley (subclass A of class 1), No. 2 barley (class 1).

Deliverable at discount, 4c per bu: No. 3 barley (class 1).

MALTING BARLEY

Deliverable at premium, 3c per bu: No. 1 malting barley (subclass A of class 1).

Deliverable at contract price: No. 2 malting barley (subclass A of class 1).

In addition to the deliverable grades listed, the Milwaukee Grain and Stock Exchange has provided by its rule No. 105 ". . . that on contracts for the immediate, regular or future delivery of grain or flaxseed, made after Jan. 1, 1913, warehouse receipts of licensed public elevators whose receipts are deliverable in fulfillment of such contracts under the rules of other regularly organized exchanges, and which prior to the making of the contract have been approved by the board of directors of this association, may be delivered in this market in fulfillment of contracts when the market whose receipts it is intended to deliver shall be specified at the time of making such contracts; and the contract grades provided by the rules of such regularly organized exchanges, shall be the grades deliverable when warehouse receipts of warehouses which are regular under the rules of such regularly organized exchanges are delivered in fulfillment of future contracts; . . ."

The only exchange which has been approved by the board of directors under the provisions of this rule is the Board of Trade of the City of Chicago.

Merchants' Exchange of St. Louis

Deliverable grades of wheat, corn and oats‡:

WHEAT

Deliverable at contract price: No. 1 red winter wheat, *No. 2 red winter.

CORN

Deliverable at premium, ½c per bu: No. 1 white corn, No. 2 white, No. 1 yellow, No. 2 yellow.

Deliverable at contract price: No. 1 mixed corn, *No. 2 mixed.

‡For information on millfeeds see "Millfeeds."

Deliverable at discount, 2c per bu†: No. 3 white corn, No. 3 yellow.

Deliverable at discount, 2½c per bu†: No. 3 mixed corn.

†During the months of March, April and May No. 3 white corn, No. 3 yellow and No. 3 mixed cannot be delivered except at a further discount of two cents (2c) per bu from schedules above.

OATS

Deliverable at contract price: No. 1 white oats, No. 2 white.

Deliverable at discount, 1½c per bu: No. 3 white oats.

Seattle Grain Exchange

Deliverable grades of wheat:

WHEAT

All sales and purchases on futures contracts shall be on basis bulk wheat, federal grades, subject to discounts and differentials applicable on futures contracts as adopted by the Seattle Grain Exchange.

Deliverable at contract price: No. 1 soft white wheat, No. 1 western white, No. 1 white club, No. 1 hard winter, No. 1 yellow hard winter, No. 1 northern spring, No. 1 red spring, No. 1 western red, No. 1 dark northern spring, No. 1 dark hard winter, No. 1 hard white.

No. 2 and No. 3 wheat shall be accepted on contract at the regular Seattle Grain Exchange discounts and differentials. Wheat taking a grade lower than No. 3 is not applicable on contract.

Sacked wheat, of the grades specified above, may be delivered on contracts at the differentials established by the Seattle Grain Exchange, in effect at the time of delivery.

Delivery on contracts may be tendered in cars at Auburn, Black River Junction, Interbay, or other established diversion points west of the Cascades; in regular warehouses or elevators at Seattle and Tacoma; also in elevators and warehouses at country points which have been declared regular by the board of trustees.

Portland Grain Exchange

Deliverable grades of wheat:

WHEAT

All trades shall be on the basis of bulk wheat of grades conforming to the official United States standards, track and/or elevator and/or warehouse, subject to the following discounts and differentials:

DELIVERIES MADE BY TENDERS OF WAREHOUSE RECEIPTS

Deliverable at contract price: No. 1 hard white wheat, No. 1 soft white, No. 1 white club, No. 1 western white, No. 1 heavy dark northern spring, No. 1 heavy northern spring, No. 1 heavy red spring, No. 1 dark northern spring, No. 1 northern spring, No. 1 red spring, No. 1 dark hard winter, No. 1 hard winter, No. 1 yellow hard winter, No. 1 western red.

Deliverable at discount, 1c per bu: No. 2 of the above subclasses.

Deliverable at discount, 3c per bu: No. 3 of the above subclasses.

Deliveries on contracts may be tendered either in cars on track at Portland, or in regular warehouses or elevators at Portland, or in elevators or warehouses at country points which have been designated regular by the board of directors. (Secs. 2, 3 and 4, Trading Rule XVI).

DELIVERIES MADE ON TRACK

Deliverable at contract price: No. 1 of the above subclasses.

Deliverable at discount: Nos. 2 and 3 of the above subclasses shall be accepted at the published discounts, differentials and service charges of the Portland Merchants' Exchange in effect at the time trade is executed.

Portland Merchants' Exchange schedule of differentials, discounts and service charges in effect at time trade is executed shall govern final settlement as it applies to smutty wheat, sacked differentials, resacking, bad order sacks and interest charges. (Secs. 1 and 2, Trading Rule XV.)

Los Angeles Grain Exchange

Deliverable grades of barley and grain sorghums:

All sales or purchases of any commodity made between members of the Los Angeles Grain Exchange for future delivery for 100-ton lots shall be known as "time contracts."

BARLEY

Deliverable at contract price: No. 1 western barley (45 lbs) or better; No. 2 bright western (42 lbs) or better.

GRAIN SORGHUMS

Deliverable at contract price: No. 2 yellow milo.

Deliveries of all grain sold on time contracts shall be made in approved public warehouses in the state of California, and shall be made by tender of regular negotiable warehouse receipt or receipts, sufficient to fill the contract covering the grain in same warehouse, which receipt or receipts shall be issued by such warehouses as are approved by the state railroad commission, and which hold a charter from the state of California, and shall have attached thereto a Los Angeles Grain Exchange certificate of inspection on each lot tendered, giving the grade, lot number, number of sacks of the grain and date of inspection, which must not be more than fifteen (15) days prior to date of tender, and must bear the name and location of the warehouse in which the grain is stored, the name of the inspector or authorized deputy who drew the sample, giving the date on which sample was drawn, as well as the condition of the sacks containing the grain. All accrued storage charges, if any, and storage charges up to and including May 31, next, shall be paid or allowed by the seller; regular or customary storage shall follow such receipts and be chargeable upon the grain. The all-railroad freight rates prevailing at the time of delivery and for a period of not less than ten (10) days after date of tender from point of delivery to Los Angeles shall be deducted by the seller. All loading out charges shall be paid or allowed by the seller. (Rule 24, sec. 20.)

San Francisco Grain Exchange

Deliverable grades of wheat and barley:

All contracts, except car lot transactions as provided in rule X of the San Francisco Grain Exchange, made through the caller for the future delivery of inspected grain are known as "time contracts."

Deliveries of grain upon "time contracts" may be made in warehouses designated as "regular" or f.o.b. cars under the provisions of rule X, sec. 1, of the rules of the San Francisco Grain Exchange.

WHEAT

All purchases and sales of wheat on "time contracts" shall be on the basis of federal grades, in burlap bags, and subject to the grain exchange schedule of differentials, discounts and dockages in effect on the date contract is made.

Deliverable at contract price: *No. 1 hard white wheat, *No. 1 soft white.

Deliverable at discount, 5c per cental: No. 1 white club wheat, No. 1 western white.

BARLEY

Deliverable at contract price: No. 2 bright western barley (official grain standard of the United States, in making deliveries of which seller shall deliver barley of such test weight per bu as the board of directors shall determine during the month of June each year).

Deliverable at discount, 50c per ton: No. 2 western barley (season's standard test weight), No. 2 bright western (test weight 1 lb less than the season's standard test weight).

Deliverable at discount, $1 per ton: No. 2 western barley (test weight 1 lb less than the season's standard test weight).

On deliveries in fulfillment of all contracts effected prior to the adoption of any change in said test weight as promulgated by the board of directors, the seller shall deliver barley of such test weight as may have been in effect prior to any change, said contracts to be designated "old" when called after any test weight change, and contracts entered into subsequent to any test weight change to be designated "new."

The Winnipeg Grain Exchange

Deliverable on 1942 May, July and October contracts:

WHEAT

Deliverable at contract price: *No. 1 Manitoba northern wheat, higher grade wheat.

Deliverable at discount, 3c per bu: No. 2 Manitoba northern wheat.

Deliverable at discount, 8c per bu: No. 3 Manitoba northern wheat.

Deliverable at discount, 12c per bu: No. 1 Canadian western garnet wheat.

Deliverable at discount, 15c per bu: No. 2 Canadian western garnet wheat.

Deliverable at discount, 18c per bu: No. 4 Manitoba northern wheat.

Deliverable at discount, 22c per bu: special No. 4 wheat.

OATS

Deliverable at contract price: *No. 2 Canada western oats, higher grade oats.

Deliverable at discount, 3c per bu: No. 3 Canada western oats, extra No. 3 Canada western oats, extra No. 1 feed.

Deliverable at discount, 5c per bu: No. 1 feed oats.

RYE

Deliverable at contract price: No. 1 Canada western rye, *No. 2 Canada western.

Deliverable at discount, 5c per bu: No. 3 Canada western rye.

FLAXSEED

Deliverable at contract price: *No. 1 Canada western flaxseed.

Deliverable at discount, 4c per bu: No. 2 Canada western flaxseed.

BARLEY†

Deliverable at contract price: *No. 2 Canada western six-row barley, No. 1 Canada western six-row, No. 1 Canada western two-row, No. 2 Canada western two-row.

Deliverable at discount, 2c per bu: No. 3 Canada western six-row barley.

Deliverable at discount, 4c per bu: No. 1 feed barley.

MILLFEEDS DELIVERABLE ON FUTURES CONTRACTS

Board of Trade of Kansas City, Mo.

Trading conducted in bran and shorts:

BRAN

Deliverable at contract price: "Contract bran" (wheat bran).

SHORTS

Deliverable at contract price: "Contract shorts" (gray shorts).

The foregoing millfeeds are deliverable at the convenience of the seller, subject to the constitution and rules of the Kansas City Board of Trade, as follows:

"Contract bran: All contracts made for wheat bran shall be understood as for 'contract bran,' and on such contracts a tender of bran to be valid must conform to the following description: Wheat bran shall consist of the coarse outer covering of the wheat kernel as separated from cleaned and scoured wheat in the usual process of commercial milling and may include ground wheat screenings and scourings mill run, but not to exceed 8%. Durum wheat bran shall not be a valid tender for delivery." (Rule 290.)

"Contract shorts: All contracts for gray shorts shall be understood as for 'contract shorts,' and on such contracts a tender of shorts to be valid must conform to the following description: gray shorts shall consist of fine particles of the outer bran, the inner bran or bee-wing bran, the germ, and the offal or fibrous materials obtained from the 'tail of the mill.' This product must be obtained in the usual process of commercial milling of wheat and shall not contain more than 6% crude fiber. It may contain ground wheat screenings and scourings mill run but not to exceed 8%." (Rule 291.)

"Delivery in car lots: To be a valid tender upon futures contracts cars of millfeed must contain 25 tons (or 500 sacks of 100 lbs net weight each when packed—no more and no less)." (Rule 299.)

"Other delivery requirements: Millfeeds tendered upon contracts for future delivery must be packed in new 100 lbs net weight burlap or cotton sacks (when packed), of dimensions not less than 40 inches by 48 inches for bran, and 40 inches by 46 inches for shorts, and must be cool, sound and sweet and conform to the description provided in these rules (Rules 290 and 291); provided, that no carload of millfeed shall be a valid tender unless the contents are packed exclusively in burlap sacks or in cotton sacks and provided further that when millfeed in cotton sacks is tendered such sacks shall be of 4.25 yard minimum weight. Carloads of millfeed to be valid for delivery must be of only one mill's manufacture, and the sacks must be properly tagged or labeled to show the name of the manufacturer and the description or analysis of the contents." (Rule 301.)

Merchants' Exchange of St. Louis

Trading conducted in bran, shorts and middlings:

Excerpts from the articles of association, by-laws and rules of the Merchants' Exchange of St. Louis:

"The definitions of millfeeds for delivery on contracts for millfeed futures shall be those as now prescribed by the Association of Feed Control Officials of the United States, which shall be changed by a regulation of the board of directors of the exchange from time to time to conform with all changes by the Association of Feed Control Officials of the United States." (Rule 1,059.)

"Any or all of the above named commodities when containing screenings not exceeding mill run, and when labeled to comply with the requirements of the Association of Feed Control Officials of the United States, shall be deliverable on their respective future contracts." (Rule 1,058.)

St. Louis Delivery

SHORTS

Deliverable at contract price: Gray wheat shorts and/or flour middlings.

The foregoing millfeeds are deliverable at the convenience of the seller, subject to the articles of association, by-laws and rules of the Merchants' Exchange of St. Louis, as follows:

"Gray wheat shorts: Gray wheat shorts shall consist of fine particles of the outer bran, the inner bran or bee-wing bran, the germ, and the offal of fibrous materials obtained from the 'tail of the mill.' This product must be obtained in the usual process of commercial milling, and shall not contain more than 6% crude fiber." (Rule 1,063.)

"Flour middlings: Flour middlings shall consist of standard middlings and red dog flour combined in the proportions obtained in the usual process of milling, and shall not contain more than 6% crude fiber." (Rule 1,064.)

"Deliveries in carloads: Deliveries made on millfeed contracts delivered St. Louis shall be made within the St. Louis and East St. Louis switching zone, in car lots of 25 tons. . . ." (Rule 1,069.)

Reinspection: All millfeed tendered on contracts shall be packed in new, 100-lb net weight sacks, and be cool, sound and sweet, and the buyer shall have the privilege of reinspection until 11 o'clock of the next business day after arrival or delivery. Deliveries shall be accompanied or followed by Merchants' Exchange official certificates of analysis (except bran, which shall be accompanied or followed by a Merchants' Exchange official certificate of inspection, specifying that the commodity is cool, sound and sweet), these certificates to be dated not more than three days previous to delivery, showing car number, initial, and the crude fiber content.

Merchants' Exchange of St. Louis
Chicago Delivery

BRAN

Deliverable at contract price: Wheat bran.

MIDDLINGS

Deliverable at contract price: Standard wheat middlings.

The foregoing millfeeds are deliverable at the convenience of the seller, subject to the articles of association, by-laws and rules of the Merchants' Exchange of St. Louis, as follows:

"Wheat bran: Wheat bran shall be the coarse outer covering of the wheat kernel as separated from cleaned and scoured wheat in the usual process of commercial milling." (Rule 1,061.)

"Standard wheat middlings: Standard wheat middlings shall consist mostly of fine particles of bran, germ, and very little of the fibrous offal obtained from the 'tail of the mill.' This product must be obtained in the usual commercial process of milling, and shall not contain more than 9.5% crude fiber." (Rule 1,062.)

"Contract deliveries: All deliveries on contracts delivered Chicago shall contemplate delivery at Chicago in car lots of 25 tons. . . ." (Rule 1,084.)

"Analysis guarantee: The seller shall guarantee the analysis of deliveries to conform with the definitions of the Association of Feed Control Officials of the United States, and that the commodity shall arrive cool, sound and sweet, at the first destination beyond Chicago." (Rule 1,087.)

Packing and branding: Deliveries on contracts Chicago shall be packed in new sacks, 100-lb net weight; branded and showing complete analysis, or unbranded; if unbranded, tagged to show the complete analysis and the name of the manufacturer. On and after Oct. 1, 1941, and until further notice, all millfeed tendered on futures contracts for either St. Louis or Chicago delivery shall be packed in 100 lbs net weight new burlap sacks, or in 100 pounds net weight new cotton sacks of 4.25 yards to the pound minimum weight material and of adequate size. No carload of millfeed shall be a valid tender unless the contents are packed exclusively in burlap sacks or in cotton sacks.

Trade Terms

C.a.f.—Cost, assurance, freight.

C. & F.—Cost and freight.

"Cafe."—Same as c.a.f. The telegraph companies charge for three words when the letters "c.a.f." are used. Cafe being a dictionary word, the telegraph companies charge for it as only a single word.

C.i.f.—Cost, insurance and freight. It implies delivery to carrier in good order, but not delivery at destination.

C.i.f. & E.—Adds to c.i.f. the element of exchange.

F.a.q.—Fair, average quality. Importers often include this in their contracts when purchases are made without sealed samples, meaning that the product delivered must be up to the standard of a fair, average quality of the season's shipments, with due allowance for difference between old and new grain. The term is more common in the grain trade than in flour transactions.

F.a.s.—Free alongside.

F.o.r.—Free on rail.

F.p.a.—Free of particular average.

P.t.—Private terms—prices not disclosed.

Pp. or pr.pr.—When appearing in connection with the signature on a letter or other document, stand for "per procurator." This signifies that the signer has the procuration or power to so sign. Such power has to be officially given by the individual or firm for which the signature is made. This abbreviation is used chiefly by importers.

S.p.a.—Subject to particular average.

W.p.a.—With particular average.

Boatloads—Refers to canal boats, which average about 8,000 bus grain. The announcement of 12 loads taken for export is equal to 96,000 bus.

Split Transactions.—A trade made in grain at a double price—for instance, 10,000 bus at 78¾ @78¾c means 5,000 bus at 78¾c and 5,000 bus at 78¾c.

Five Atlantic Ports.—When this term is used, it means Boston, New York, Philadelphia, Baltimore and Newport News.

F.o.b.—On this term the Millers' National Association says: If used in connection with "lighterage free," the literal meaning is guaranteed delivery in good order on wharf (or in warehouse) or on steamer, as each sale may indicate. As for instance, "f.o.b. New York," or "f.o.b. steamer at New York." If shipments are not available to the steamer when called for in accordance with ocean freight contract, the steamer may charge and collect demurrage (value of steamer's time while waiting for delivery, if delay occurs).

FLOUR DISTRIBUTORS CONTRACT

The following uniform sales contract for wholesale flour distributors to use in their l.c.l. trade has been officially adopted by the National Association of Flour Distributors.

This contract has been prepared and copyrighted by the National Association of Flour Distributors and all rights to its use have been restricted to those licensed by the national association.

Contract No..... Dated.....

JOHN BLANK & CO., Philadelphia, Pa., seller, agrees to sell to ..... of....., buyer, and buyer agrees to buy from seller the following commodities of the kind and quantity hereinafter specified (manufactured or to be manufactured) on the terms and conditions and subject to the agreements stated below and on the back hereof which are hereby incorporated in this contract by reference and made a part hereof.

☐ F.o.b. carrier at shipping point, freight charges or delivery charges to be prepaid or allowed by seller; or

(Check one)

☐ Delivered to; ex warehouse; or f.o.b. track at..... (Specify destination point.)

Terms..... Salesman.....

Basis of shipment or delivery.....
(Car lot, pool car, l.c.l., l.&r, all rail, truck, boat or barge, or as otherwise specified.)

Quantity—Bbls. tons or packages	Packages: Commodity	Size	Kind	Brand or other description	Price per unit	Basis
.....	.....	...	...	.....	.....	.....
.....	.....	...	...	.....	.....	.....
.....	.....	...	...	.....	.....	.....
.....	.....	...	...	.....	.....	.....
.....	.....	...	...	.....	.....	.....
.....	.....	...	...	.....	.....	.....

Time of Shipment: On written directions to be furnished by buyer, shipment or delivery is to be made as follows:.....
.....
.....
.....

TERMS AND CONDITIONS

1. This contract shall be signed by both buyer and seller and constitutes the complete agreement between the parties hereto and cannot be changed in any manner whatsoever without the written consent of both buyer and seller.

2. This contract is not binding upon seller until confirmed in writing by seller or duly authorized agent of seller at seller's office. Such confirmation may be indicated upon the face of this contract in the space provided therefor, or may consist of a separate letter or notice of confirmation, which may be mailed to buyer.

3. There are no conditions, representations or warranties, verbal or otherwise, except as herein stated.

4. No agent or representative has authority to modify or change the terms of this contract.

5. **Package and Sack Differentials**—The Millers' National Federation's official publication entitled "Flour Package Differentials (Including Phosphated and Self-Rising Flour Differential Schedule)" in effect at the date of this contract is hereby incorporated in this contract by reference and made a part hereof, and all of its terms and provisions shall be binding upon the parties to this contract. (Conditions continued on the back hereof.)

CONFIRMED:

JOHN BLANK & CO., Seller

By .....

Date .....

JOHN BLANK & CO., Seller

By .....

..... Buyer.

By .....

AGREEMENTS (continued from the front)

Net Weights—It is agreed that variations in the weight of the commodities to be sold hereunder will occur through changes in atmospheric conditions affecting moisture content. It is therefore agreed that reasonable variations in weight shall be permitted; further, that if any flour delivered hereunder has a moisture content of less than 13⅓% when weighed as determined by any method officially approved by the American Association of Cereal Chemists, the weight of such flour shall nevertheless be calculated on the basis of a moisture content of 13⅓%, and the weight so arrived at by such calculation shall be conclusively deemed to be the weight of such flour at the time of such weighing.

Collections and Payments—1. Seller shall have the right to withhold shipment or delivery of any merchandise covered hereby or any portion thereof, until all outstanding indebtedness due seller from buyer is paid; further, where condition of buyer's credit at time of shipment or delivery in the seller's opinion, warrants, the seller may insist upon payment on or before shipment or delivery, of all outstanding indebtedness then due seller from buyer, including payment of bill or bills covering the portion so to be shipped or delivered.

2. When the buyer designates the collecting agency he shall be responsible for full and final payment to seller.

Shipments—1. Seller shall have the option as to routing.

2. Buyer agrees to furnish package assortments and shipping or delivery instructions in writing (and on sales on a bulk basis the necessary packages to the point from which shipment is to be made) to reach seller at least ten (10) days before the date for any shipment or delivery specified herein.

3. When buyer has more than one uncompleted contract with seller for the same brand of flour or other commodities covered by this contract, the seller may require the buyer to accept delivery of such commodities covered by such contracts in the order of the dates of said contracts.

4. If there is more than one installment of goods shipped or stipulated herein to be shipped, this contract shall be construed to be severable as to each installment, except where such construction would be in direct conflict with the provisions hereinafter set forth under "Rights of buyer upon seller's default" and "Rights of seller upon buyer's default," and breach or default of either buyer or seller as to any installment or installments shall not give the other party a right to cancel or terminate this contract, except as herein otherwise expressly provided.

5. Prices named in this contract are based on freight rates in effect at date of contract, and will be increased or decreased in accordance with freight rates applicable at time of shipment.

Taxes—Any and all taxes, impositions, exactions or charges or any increase therein, whether for revenue or for regulation of commerce or for any other purpose, (including any and all exactions, charges, or purchase requirements under any so-called "certificate plan" or similar legislation) not in effect on the date of this contract, which may, prior to the completion of deliveries hereunder, be levied, assessed, imposed, required, or increased by the United States or any state thereof or other governmental agency on, or measured in terms of, any of the finished products remaining undelivered, and which are to be delivered hereunder, or on, or measured in terms of, any commodity used in the manufacture of such finished products or the containers therefor or commodities used in the manufacture of such containers, or the processing, purchase, sale, holding for sale, distribution, dealing in, transportation, use or handling of any such products, commodities or containers, if paid or borne by seller directly or indirectly, shall be billed separately to buyer, where not prohibited by law, and where the determination of the amount of the tax, imposition, exaction, charge or increase per barrel or other unit of measure is possible or calculation by the application of any official published conversion rate or otherwise, and shall be paid by buyer to seller. Any of such taxes, impositions, exactions, charges or increases which the seller shall be finally relieved from paying or which shall be later refunded or returned to seller at any time and for any cause shall be refunded or credited to buyer by seller as promptly as possible, after deduction by seller, of any reasonable expenses incurred in preventing collection of such taxes, impositions, exactions, charges or increases, or in obtaining or securing such refunds or returns, and in making such reimbursements to buyer, and after paying and discharging all tax liabilities to which seller may be subject by reason of its having been relieved from paying such taxes, impositions, exactions, charges or increases, or having secured such refunds or returns. Seller shall be under no obligation to contest the validity of any such tax, imposition, exaction, charges or increase, or to prosecute any such claim for refunds or returns.

Warranty—Seller expressly warrants that commodities to be delivered hereunder will be representative of the brand or grade specified herein to be sold. Buyer hereby expressly waives any claim or defense based on the quality of any such commodities (including any claim or defense based on insect infestation) unless the buyer complies strictly with the following conditions precedent:

(A) If the destination point above specified for delivery of such commodities is located in an area in which there can be procured an inspection of such commodities by an inspection department regularly maintained by a recognized trade organization or exchange, such as the New York Produce Exchange, buyer shall comply with all such rules and regulations of such trade organization or exchange with respect to the time and manner in which notice of complaint must be given to seller, and with respect to procuring samples of such commodities and an official inspection thereof, in the same manner as in cases of sales made upon or through, or pursuant to the rules and regulations of such trade organization or exchange. To the extent, if any, that such rules or regulations do not provide for the time and manner in which such notice must be given, or such inspection made, the provisions of the following subparagraph (B) hereof shall apply. The findings of such inspection department upon any such official inspection shall be binding upon the parties hereto.

(B) In all cases other than those specified in the preceding paragraph (A) hereof buyer shall within five (5) days after delivery of commodities, or after receipt by buyer of notice of arrival at destination point and availability for delivery of such commodities, whichever is earlier, give notice to seller by registered mail specifying the nature of the buyer's complaint and advising seller where seller may inspect such goods; and buyer shall also permit seller or seller's representative at any reasonable time or times to inspect such commodities and take samples thereof, or, if such commodities are not in buyer's possession, buyer shall arrange for such inspection and taking of samples by seller or seller's representative.

In case only a portion of the commodities included in any delivery are made available for inspection and sampling as above provided, buyer expressly waives any claim or defense as to the portion not so made available. It is agreed that compliance by buyer with the above stated conditions precedent shall in no case constitute an admission by seller of the merits or amount of buyer's said claim or defense. In no event shall buyer be entitled to inspect any commodities sold hereunder before accepting delivery thereof, unless otherwise provided for in this contract.

Rights of Buyer Upon Seller's Default—In the event that seller, after the receipt of written shipping instructions, shall fail to make shipment within the time required hereunder (including any extension of such time pursuant to any provision hereof), buyer may, by written notice mailed to seller (which shall be conclusively deemed to be given on the date of mailing):

(1) Cancel this contract as to the undelivered balance thereof; or

(2) Terminate this contract as to the undelivered balance thereof, and purchase within a period of fourteen (14) days thereafter an equal quantity of goods of the same kind and grade at not to exceed the market price thereof and recover from seller the excess of the price so paid over the purchase price named herein, plus any incidental loss or expense, and in addition thereto, recover a sum equal to one per cent (1%) of the contract price named herein.

Provided, however, that in case the failure by seller to make shipment has occurred by reason of any of the following causes (whether directly affecting seller or affecting seller's source of supply): fire, flood, earthquake, tornado, labor difficulties, riot, federal or state laws or regulations, acts or defaults of common carrier, or act of God or the public enemy, the seller may notify the buyer thereof in writing sent by registered mail to the buyer on or before the time shipment would otherwise be required and thereupon the time for such shipment shall be extended to a date which is ten (10) days subsequent to the date upon which such cause for failure to make shipment shall cease to exist; and the seller shall not be deemed in default hereunder prior to the expiration of such 10-day period.

Rights of Seller Upon Buyer's Default—In case of default by buyer (provided the buyer shall, without limitation, be in default if buyer becomes insolvent or is adjudged bankrupt, or if buyer shall fail to make any payment to seller under this or any other contract between buyer and seller, or if at any time the property and assets of buyer are in liquidation, or any receiver is appointed therefor, or if any proceedings be instituted with respect to buyer or buyer's property under any provisions of the federal bankruptcy laws or any similar federal or state legislation), seller may by written notice mailed to buyer (which shall be conclusively deemed to be given on the date of mailing):

1. Effect delivery of the undelivered portion of said merchandise to the buyer, either by delivery to buyer's address, or by storing same for the buyer's account in the seller's warehouse or elsewhere, notify the buyer of such delivery, and recover the contract purchase price together with any accrued carrying charges at the rate of one sixth cent (⅙c) per barrel per day on flour, and one cent (1c) per ton per day on commodities other than flour, from expiration date of contract, plus delivery charges and storage expense to date of payment; or,

2. Cancel this contract as to the undelivered balance thereof; or

3. Terminate this contract as to the undelivered balance thereof and recover from buyer as liquidated damages a sum to be computed by the following formula: As to flour (a) twenty cents (20c) for each barrel remaining undelivered as the cost of selling, plus (b) one sixth cent (⅙c) per day for each day from date or dates specified for delivery or shipment to date of termination for each barrel remaining unshipped or undelivered, plus (c) any freight charges, demurrage or other out-of-pocket expense incurred by reason of the wrongful refusal of buyer to accept any shipment made, plus (d) amount, if any, by which the purchase price hereunder of such undelivered flour exceeds the market value thereof at seller's place of business on the date of termination. In case such market value at the date of termination exceeds the purchase price hereunder, the excess shall be credited against the amount provided in (a), (b) and (c) but solely in reduction of damages. And as to commodities other than flour (a) one dollar ($1) for each ton remaining undelivered as the cost of selling, plus (b) one cent (1c) per day for each day from date or dates specified for delivery or shipment to date of termination for each ton remaining unshipped or undelivered (ratably on fractional tons), plus (c) any freight charges, demurrage or other out-of-pocket expenses incurred by reason of the wrongful refusal of buyer to accept any shipment made, plus (d) amount, if any, by which the purchase price hereunder of such undelivered commodity exceeds the market value thereof at seller's place of business on the date of termination. In case such market value on date of termination exceeds such purchase price, the excess shall be credited against the sums provided in (a), (b) and (c) above, but solely in reduction of damages.

The average price at which seller shall in the usual course of business on the date of termination make any sale or sales of substantially similar quantities of any such flour or other commodity for delivery at the time or times herein specified, (or, if no such sale be made, the price at which seller shall on such date in the usual course of business offer substantially similar quantities of such commodity for delivery at the time or times herein specified) shall be conclusively deemed to be the "market value" of such commodity on such date for the purpose of computing such liquidated damages. If no such sales or offers shall be made by seller on such date, such market value may be established by any other competent evidence.

Interest and Attorney's Fees—The buyer agrees to pay interest at the rate of 6% per annum from the due date upon all sums due the seller hereunder. In the event any legal action is taken by the seller to recover any sums due hereunder, buyer agrees to pay seller a reasonable sum as and for seller's attorney's fees; and, the amount thereof shall be determined in any such action and included in any judgment, order, or decree in seller's favor.

Automatic Extension—If buyer shall fail to furnish complete shipping or delivery instructions in writing (including directions as to package assortments, and necessary packages if sale is made on a bulk basis) to reach seller ten (10) days before the date for any shipment or delivery specified herein, or before the final date specified for shipment or delivery, as the case may be, and if buyer shall fail to notify seller in writing that he does not intend to accept any further deliveries under this contract, then (unless seller elects to exercise his rights to cancel or terminate this contract) this contract, as to such shipment or shipments, shall without notice, automatically be extended from day to day until buyer furnishes complete written shipping instructions (including directions as to package assortments, and necessary packages if sale is made on a bulk basis) in accordance with the provisions of paragraph entitled "Shipments," or until buyer notifies seller in writing that he does not intend to accept any further deliveries under this contract, or until seller exercises his right as provided herein to cancel or terminate this contract; and for each day during which this contract is thus automatically extended buyer will pay seller carrying charges at the rate of one sixth cent (⅙c) per barrel of flour per day and one cent (1c) per ton per day on commodities other than flour.

Assignment—Neither this contract nor any interest therein may be transferred or assigned by the buyer without the prior written consent of the seller.

Metric System Equivalents

United States equivalents of the more important metric units:

LENGTH

1 inch ..... 2.54 centimeters
1 foot ..... 30.48 centimeters
1 yard ..... 91.44 centimeters
1 mile ..... 1.6093 kilometers
1 centimeter ..... .39 inch
1 meter ..... 3.28083 feet
1 kilometer ..... 3,280.83 feet

AREA

1 square foot..... 929.0341 sq centimeters
1 square yard..... .83613 sq meters
1 acre ..... .404687 hectares
1 square mile..... 258.9998 hectares
1 square centimeter. .154997 sq inches
1 square meter..... 1.195985 sq yards
1 hectare ..... 2.47104 acres

WEIGHT

1 pound ..... .45359 kilograms
1 short ton ..... .90718486 metric tons
1 kilogram ..... 2.204622 pounds
1 metric ton ..... 1.1023112 short tons

To convert metric tons into bushels of wheat (60 lbs), multiply the number of tons by 36.7.

To convert metric tons into barrels of flour (196 lbs), multiply the number of tons by 11.2.

To convert metric tons into bushels of flaxseed (56 lbs), multiply the number of tons by 39.3.

To convert metric tons into bushels of oats (32 lbs), multiply the number of tons by 68.9.

To convert metric tons into bushels of corn (56 lbs), multiply the number of tons by 39.3.

To convert metric tons into bushels of barley (48 lbs), multiply the number of tons by 45.9.

To convert hectares into acres, multiply the number of hectares by 2.471.

A quintal being one tenth of a metric ton, to convert quintals into bushels, multiply the number of quintals by one tenth of the figures given above for tons: 3.67 for wheat, 3.93 for flaxseed, 6.89 for oats, and 3.93 for corn.

UNIFORM FAMILY FLOUR SALES CONTRACT

Adopted July 20, 1938

Contract No..... Dated.....
..... of .....
SELLER, agrees to sell to .....
of..... BUYER, and BUYER agrees to buy from SELLER the following commodities (to be manufactured) on the terms and conditions and subject to the agreements stated below and/or on the back hereof,

☐ F.O.B. carrier at shipping point, freight charges (basis carload freight rate in effect on date of this contract) to be prepaid or allowed by SELLER,

(Check one):

☐ delivered,

to .....
(Specify destination point.)

QUANTITY (bbl, ton or cwt)	COMMODITY (Flour, feed, etc.)	PACKAGES Size	PACKAGES Kind	Seller's brand or other description	PRICE* (Per bbl, if flour, per ton if feed, or as otherwise stated)
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....

***AUTOMATIC INCREASE IN PRICE IN CERTAIN CASES:** If the time of shipment herein specified under caption "Time of Shipment" is a longer period than 60 days from the date hereof, then in such case on installments of this contract remaining unshipped after 60 days from the date hereof, and prior to the time fixed herein for final shipment under said caption, it is agreed that the basic price, above specified, per barrel of flour made from wheat or rye shall automatically be increased one-sixth (1/6c) cent per barrel per day, commencing on the sixty-first (61st) day after the date hereof and continuing until date of shipment, or until time fixed for final shipment under said caption, whichever event first occurs, and that the basic price above specified per ton of millfeed shall be automatically increased one cent (1c) per ton per day, commencing on the sixty-first (61st) day after the date hereof, upon the balance remaining unshipped at said date and continuing until date of shipment, or until time fixed for final shipment under caption "Time of Shipment," whichever event first occurs.

TIME OF SHIPMENT: On directions to be furnished by BUYER shipment is to be made as follows:
....
....

TERMS OF PAYMENT: .....draft with bill of lading attached through.....Bank of.....

RAILROAD DELIVERY AT DESTINATION: .....
SELLER shall have the option as to routing, except as to delivering carrier.

BASIS OF SHIPMENT: .....
(Specify whether c.l., l.c.l., split car, mixed car, truck, boat or barge.)

DIFFERENTIALS: The Millers' National Federation's official publication entitled "Flour Package Differentials" in effect at the date of this contract is hereby incorporated in this contract by reference and made a part hereof; and all of its terms and provisions shall be binding upon the parties hereto.

THIS CONTRACT constitutes the complete agreement between the parties hereto; and cannot be changed in any manner except in writing subscribed by BUYER and SELLER or their duly authorized officers.

This contract is subject to confirmation by the SELLER at.....
.....SELLER
By.....
.....BUYER
By.....

NET WEIGHTS: The commodities covered by this contract are sold on the basis of net weights when packed, United States Government moisture standards to govern.

COLLECTIONS: Where buyer designates the collecting bank he shall be responsible to seller for any loss or damage to seller by reason of any failure or default on the part of said bank in connection with payment by buyer under this contract.

TAXES: Any and all taxes or exactions, not in effect on the date of this contract, which may, prior to the completion of deliveries hereunder, be levied, imposed or increased by the United States or any state thereof or other governmental agency on or measured in terms of any of the finished products remaining unshipped and which are to be delivered hereunder, or on or measured in terms of any commodity used in the manufacture of such finished products or the containers therefor or commodities used in the manufacture of such containers, or the processing, purchase, sale, holding for sale, distribution, dealing in, transportation, use or handling of any of such products, commodities or containers, if paid or borne by seller directly or indirectly shall be billed separately to buyer, where not prohibited by law, and where the determination of the amount of the tax per barrel or other unit of measure is possible of calculation by the application of any official published conversion rate or otherwise, and shall be paid by buyer to seller. Any of such taxes or exactions which the seller shall be finally relieved from paying or which shall be later refunded or returned to seller at any time and for any cause shall be refunded or credited to buyer by seller as promptly as possible after deduction by seller of any reasonable expenses incurred in preventing collection of such taxes or exactions or in obtaining or securing such refunds or returns and in making such reimbursement to buyer, and after paying and discharging all tax liabilities to which seller may be subjected by reason of its having been relieved from paying such taxes or exactions or having secured such refunds or returns. Seller shall be under no obligation to contest the validity of any such tax or exaction or to prosecute any such claims for refunds or returns.

SHIPMENTS: Where the basis of shipment is f.o.b., delivery of goods by seller to the carrier at point of shipment shall constitute delivery to buyer, subject to the lien of seller for the unpaid purchase price. Buyer shall furnish seller complete shipping instructions (and on sales made on a bulk basis, the necessary containers) at least ten (10) days before the time of shipment.

If there is more than one installment of goods shipped or stipulated herein to be shipped, this contract shall be construed to be severable as to each installment, except where such construction would be in direct conflict with the provisions hereinafter set forth under "Rights of Buyer" and "Rights of Seller," and breach or default of either buyer or seller as to any installment or installments shall not give the other party a right to cancel this contract, except as herein otherwise expressly provided.

WARRANTY: Seller expressly warrants that any goods contracted herein will be representative of the brand or grade specified herein to be sold. Buyer hereby waives any claim or defense based on the quality of the commodities specified herein, unless (1) within ten (10) days after buyer learns by use or otherwise of the defect complained of, but in any event within twenty (20) days after receipt of notice of arrival of said commodities at destination, buyer sends seller at seller's main office a letter by registered mail specifying the nature of the complaint; and (2) within said twenty (20) days sends by parcel post or express prepaid to seller's said office a five (5) pound sample of the goods alleged to be defective or inferior.

Buyer hereby waives any claim or defense based on insect infestation of the commodities specified herein unless buyer promptly after discovery of such infestation and in any event within twenty (20) days after receipt of notice of arrival of said commodities at destination sends seller at seller's main office a letter by registered mail specifying such insect infestation and (2) within said time sends by parcel post or express prepaid to seller's said office a five (5) pound sample of the goods alleged to be infested.

It is understood that compliance by buyer with the above enumerated steps shall not constitute an admission by seller of the merits or amount of buyer's said claim or defense.

RIGHTS OF BUYER: In case of default by seller (provided that seller shall, without limitation, be in "default" if seller becomes insolvent or is adjudged bankrupt, or if seller shall fail to make any payment to buyer when due under this or any other contract between buyer and seller, or if at any time the property and assets of seller are in liquidation, or if seller's financial responsibility becomes impaired; but that seller shall not be in "default" for nonperformance due to fire, flood, earthquake, tornado, labor difficulties, riot, federal or state laws or regulations, acts or defaults of common carriers, or Act of God or the public enemy), buyer may (within fourteen (14) days of notice thereof) by written notice sent by registered mail to seller at seller's main office:

1) cancel the contract; or

2) terminate the contract as to the portion thereof in default and purchase within said fourteen (14) days an equal quantity of goods of the same kind and grade and recover from seller the excess of the price so paid over the purchase price named herein, plus any incidental loss or expense, and in addition thereto, recover a sum equal to one per cent (1%) of the contract price named herein; or

3) terminate the contract as to any unshipped balance, and recover from seller as liquidated damages a sum to be computed by the following formula: (except as to millfeed) (a) one per cent (1%) of the per barrel contract price named herein multiplied by the number of barrels remaining unshipped, plus (b) amount of rise, if any, per bushel in the average market price of cash wheat or rye, as the case may be, in carload lots at seller's mill or basing point (whichever applicable) between date of contract and date of termination multiplied by four and six-tenths (4.6) times the number of barrels remaining unshipped. In case of a decline in such price of such wheat or rye between said dates, buyer shall recover the sum specified in (a), less the amount of such decline per bushel multiplied by four and six-tenths (4.6) times the number of barrels remaining unshipped. Such amount shall be credited to the amount provided in (a) solely in reduction of damages. And as to millfeed (a) one per cent (1%) of the per ton contract price named herein, multiplied by the number of tons remaining unshipped, plus (b) rise, if any, in market price of such feed between date of contract and date of termination. In case of a decline in such price of such feed, such decline shall be credited to the amount provided in (a) solely in reduction of damages.

Provided: That if the default consists of a failure by seller to ship at the time required, buyer may cancel or terminate the contract as above provided only after giving seller preliminary written notice of intention to cancel or terminate, by registered mail addressed to seller's main office. If seller does not ship within eight (8) days after mailing of such notice, then buyer may, within fourteen (14) days after the expiration of said eight (8) days, cancel or terminate the contract as above provided.

RIGHTS OF SELLER: In case of default by buyer (provided that buyer shall, without limitation, be in "default" if buyer becomes insolvent or is adjudged bankrupt, or if buyer shall fail to make any payment to seller when due under this or any other contract between buyer and seller, or if at any time the property and assets of buyer are in liquidation, or if buyer's financial responsibility becomes impaired; but that buyer shall not be in "default" for nonperformance due to fire, flood, earthquake, tornado, labor difficulties, riot, federal or state laws or regulations, acts or defaults of common carriers, or Act of God or the public enemy), seller may (within fourteen (14) days of notice thereof) by written notice sent by registered mail to buyer at buyer's main office:

1) cancel the contract; or

2) terminate the contract as to the portion thereof in default or as to any unshipped balance, or both, and

A) resell, within said fourteen (14) days, any of the above goods which have been shipped and which buyer has wrongfully failed or refused to accept, and recover from buyer difference between the above purchase price thereof and the price obtained on resale, if latter be less than former; also any incidental loss and expense, including salesman's time and expense in connection with such resale, and all demurrage (resale anywhere in the usual course of seller's business or at any terminal market or at or near destination shall be proper and conclusive in the absence of bad faith), and

B) if seller terminates as to unshipped balance, recover from buyer as liquidated damages a sum to be computed by the following formula: (except as to millfeed) (a) one-sixth (1/6) cent per day for each day from date of contract to date of termination for each barrel remaining unshipped, plus (b) twenty (20c) for each barrel remaining unshipped as the cost of selling, plus (c) amount of decline, if any, per bushel in the average market price of cash wheat or rye, as the case may be, in carload lots at seller's mill or basing point (whichever applicable) between date of contract and date of termination multiplied by four and six-tenths (4.6) times the number of barrels remaining unshipped. In case of a rise in such price of such wheat or rye between said dates, seller shall recover the sums specified in (a) and (b), less the amount of such rise per bushel multiplied by four and six-tenths) (4.6) times the number of barrels remaining unshipped. Such amount shall be credited to the amounts provided in (a) and (b) solely in reduction of damages. And as to millfeed: (a) one cent (1c) per day for each day from date of contract to date of termination for each ton remaining unshipped, plus (b) decline, if any, in market price of such feed between date of contract and date of termination. In case of a rise in such price, such rise shall be credited to the sum provided in (a) above solely in reduction of damages.

Provided: That if the default consists of a failure by buyer to provide shipping instructions as required under "Shipments," seller may cancel or terminate the contract as above provided only after giving buyer preliminary written notice of intention to cancel or terminate, by registered mail addressed to buyer's main office. If buyer does not provide the required shipping instructions within eight (8) days after mailing of such notice, then seller may, within fourteen (14) days after the expiration of said eight (8) days, cancel or terminate the contract as above provided.

PROVISION FOR AUTOMATIC EXTENSION: If buyer shall fail to furnish complete shipping instructions (and necessary containers if sale is made on a bulk basis) to reach seller at his main office ten (10) days before the date for any shipment specified herein, or before the final date specified for shipment, as the case may be, and if buyer shall fail to notify seller that he does not intend to accept any further deliveries under this contract, then (unless seller elects to exercise his right to cancel or terminate the contract) this contract, as to such shipment, or shipments, shall without notice automatically be extended from day to day until buyer furnishes complete shipping instructions (and necessary containers if sale is made on a bulk basis) in accordance with the provisions of paragraph entitled "Shipments," or until buyer notifies seller that he does not intend to accept any further deliveries under this contract, or until seller exercises his right provided herein to cancel or terminate the contract; and for each day during which the contract is thus automatically extended buyer will pay seller carrying charges at the rate of one-sixth (1/6c) cents per barrel of flour per day and one (1c) cent per ton of feed per day.

LIMITATION OF ACTIONS: No action at law or in equity shall be maintained by buyer against seller or any of seller's other vendees to recover damages for alleged violation by seller or said vendee of any law, federal or state, now in effect or hereafter enacted, pertaining to discrimination in price, services or facilities including the Clayton Act (U. S. C. title 15, secs. 12 to 27 inclusive) as amended by Act of Congress approved June 19, 1936, or any further amendment thereto, as respects any products delivered by seller to buyer pursuant to this contract unless (1) written notice of the particular deliveries on which the claim for such damages is based shall be given by buyer to seller at seller's main office by registered mail within six (6) months after delivery thereof to buyer with a full statement of the particulars of such claim then known to buyer, and (2) action shall be commenced within one (1) year after delivery of such products to buyer.

UNIFORM FLOUR CONTRACT FOR THE BAKING INDUSTRY

(As Adopted July 5, 1938)

Contract No. ..... Dated.....
.....of..... SELLER, agrees to sell to.....of.....BUYER, and BUYER agrees to buy from SELLER the following commodities (to be manufactured), on the terms and conditions and subject to the agreements stated below and/or on the back hereof,

☐ F.O.B. carrier at shipping point, freight charges (basis carload freight rate in effect on date of this contract) to be prepaid or allowed by SELLER.

(Check one):

☐ delivered,

to .....(Specify destination point.).....

QUANTITY (bbls)	COMMODITY (Type of flour or whole wheat, etc.)	CONTAINERS Size	CONTAINERS Kind	Seller's brand or other description	*PRICE (per bbl)
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....

***AUTOMATIC INCREASE IN PRICE IN CERTAIN CASES:** If the time of shipment herein specified under caption "Time of Shipment" is a longer period than one hundred and twenty (120) days from the date hereof, then in such case on installments of this contract shipped after one hundred and twenty (120) days from the date hereof and prior to the time fixed herein for final shipment under said caption, it is agreed that the basic price above specified per barrel of flour made from wheat or rye shall be automatically increased one-sixth cent (1/6c) per barrel per day, commencing on the one hundred and twenty-first (121) day after the date hereof, and continuing until date of shipment within said time fixed herein for final shipment.

TIME OF SHIPMENT: On directions to be furnished by BUYER shipment is to be made as follows:.....

TERMS OF PAYMENT:.....draft with bill of lading attached through .....Bank of.....

RAILROAD DELIVERY AT DESTINATION: .....
SELLER shall have the option as to routing, except as to delivering carrier.

BASIS OF SHIPMENT: .....
(Specify whether c.l., l.c.l., split car, mixed car, truck, boat or barge.)

THIS CONTRACT constitutes the complete agreement between the parties hereto; and cannot be changed in any manner except in writing subscribed by BUYER and SELLER or their duly authorized officers.

This contract is subject to confirmation by the SELLER at.....
.....SELLER
By.....
.....BUYER
By.....

NET WEIGHTS: The commodities covered by this contract are sold on the basis of net weights when packed, United States government moisture standards to govern.

COLLECTIONS: Where buyer designates the collecting bank he shall be responsible to seller for any loss or damage to seller by reason of any failure or default on the part of said bank in connection with payment by buyer under this contract.

TAXES: Any and all taxes or exactions, not in effect on the date of this contract, which

may, prior to the completion of deliveries hereunder, be levied, imposed or increased by the United States or any state thereof or other governmental agency on or measured in terms of any of the finished products remaining unshipped and which are to be delivered hereunder, or on or measured in terms of any commodity used in the manufacture of such finished products or the containers therefor or commodities used in the manufacture of such containers, or the processing, purchase, sale, holding for sale, distribution, dealing in, transportation, use or handling of any of such products, commodities or containers, if paid or borne by seller directly or indirectly shall be billed separately to buyer, where not prohibited by law, and where the determination of the amount of the tax per barrel or other unit of measure is possible of calculation by the application of any official published conversion rate or otherwise, and shall be paid by buyer to seller. Any of such taxes or exactions which the seller shall be finally relieved from paying or which shall be later refunded or returned to seller at any time and for any cause shall be refunded or credited to buyer by seller as promptly as possible after deduction by seller of any reasonable expenses incurred in preventing collection of such taxes or exactions or in obtaining or securing such refunds or returns and in making such reimbursement to buyer, and after paying and discharging all tax liabilities to which seller may be subjected by reason of its having been relieved from paying such taxes or exactions or having secured such refunds or returns. Seller shall be under no obligation to contest the validity of any such tax or exaction or to prosecute any such claims for refunds or returns.

SHIPMENTS: Where the basis of shipment is f.o.b., delivery of goods by seller to the carrier at point of shipment shall constitute delivery to buyer, subject to the lien of seller for the unpaid purchase price. Buyer shall furnish seller complete shipping instructions (and on sales made on a bulk basis, the necessary containers) at least ten (10) days before the time of shipment.

If there is more than one installment of goods shipped or stipulated herein to be shipped, this contract shall be construed to be severable as to each installment, except where such construction would be in direct conflict with the provisions hereinafter set forth under "Rights of Buyer" and "Rights of Seller," and breach or default of either buyer or seller as to any installment or installments shall not give the other party a right to cancel this contract, except as herein otherwise expressly provided.

WARRANTY: Seller expressly warrants that any goods contracted herein will be representative of the brand or grade specified herein to be sold. Buyer hereby waives any claim or defense based on the quality of the commodities specified herein, unless (1) within ten (10) days after buyer learns by use or otherwise of the defect complained of, but in any event within forty-five (45) days after receipt of notice of arrival of said commodities at destination, buyer sends seller at seller's main office a letter by registered mail specifying the nature of the complaint; and (2) within said forty-five (45) days sends by parcel post or express prepaid to seller's said office a five (5) pound sample of the goods alleged to be defective or inferior; provided that compliance by buyer with the above enumerated steps shall not constitute an admission by seller of the merits or amount of buyer's said claim or defense.

RIGHTS OF BUYER: In case of default by seller (provided that seller shall, without limitation, be in "default" if seller becomes insolvent or is adjudged bankrupt, or if seller shall fail to make any payment to buyer when due under this or any other contract between buyer and seller, or if at any time the property and assets of seller are in liquidation, or if seller's financial responsibility becomes impaired; but that seller shall not be in "default" for nonperformance due to fire, flood, earthquake, tornado, labor difficulties, riot, federal or state laws or regulations, acts or defaults of common carriers, or Act of God or the public enemy), buyer may (within fourteen (14) days of notice thereof) by written notice sent by registered mail to seller at seller's main office:

1) cancel the contract; or

2) terminate the contract as to the portion thereof in default and purchase within said fourteen (14) days an equal quantity of goods of the same kind and grade and recover from seller the excess of the price so paid over the purchase price named herein, plus any incidental loss or expense, and in addition thereto, recover a sum equal to one per cent (1%) of the contract price named herein; or

3) terminate the contract as to any unshipped balance, and recover from seller as liquidated damages a sum to be computed by the following formula: (a) one per cent (1%) of the per barrel contract price named herein multiplied by the number of barrels remaining unshipped, plus (b) amount of rise, if any, per bushel in the average market price of cash wheat or rye, as the case may be, in carload lots at seller's mill or basing point (whichever applicable) between date of contract and date of termination multiplied by four and six-tenths (4.6) times the number of barrels remaining unshipped. In case of a decline in such price of such wheat or rye between said dates, buyer shall recover the sum specified in (a), less the amount of such decline per bushel multiplied by four and six-tenths (4.6) times the number of barrels remaining unshipped. Such amount shall be credited to the amount provided in (a) solely in reduction of damages.

Provided: That if the default consists of a failure by seller to ship at the time required, buyer may cancel or terminate the contract as above provided only after giving seller preliminary written notice of intention to cancel or terminate, by registered mail addressed to seller's main office. If seller does not ship within eight (8) days after mailing of such notice, then buyer may, within fourteen (14) days after the expiration of said eight (8) days, cancel or terminate the contract as above provided.

RIGHTS OF SELLER: In case of default by buyer (provided that buyer shall, without limitation, be in "default" if buyer becomes insolvent or is adjudged bankrupt, or if buyer shall fail to make any payment to seller when due under this or any other contract between buyer and seller, or if at any time the property and assets of buyer are in liquidation, or if buyer's financial responsibility becomes impaired; but that buyer shall not be in "default" for nonperformance due to fire, flood, earthquake, tornado, labor difficulties, riot, federal or state laws or regulations acts or defaults of common carriers, or Act of God or the public enemy), seller may (within fourteen (14) days of notice thereof) by written notice sent by registered mail to buyer at buyer's main office:

1) cancel the contract; or

2) terminate the contract as to the portion thereof in default or as to any unshipped balance, or both, and

A) resell, within said fourteen (14) days, any of the above goods which have been shipped and which buyer has wrongfully failed or refused to accept, and recover from buyer difference between the above purchase price thereof and the price obtained on resale, if latter be less than former; also any incidental loss and expense, including salesman's time and expense in connection with such resale, and all demurrage (resale anywhere in the usual course of seller's business or at any terminal market or at or near destination shall be proper and conclusive in the absence of bad faith), and

B) if seller terminates as to unshipped balance, recover from buyer as liquidated damages a sum to be computed by the following formula: (a) one-sixth (1-6c) cent per day for each day from date of contract to date of termination for each barrel remaining unshipped, plus (b) twenty (20c) cents for each barrel remaining unshipped as the cost of selling, plus (c) amount of decline, if any, per bushel in the average market price of cash wheat or rye, as the case may be, in carload lots at seller's mill or basing point (whichever applicable) between date of contract and date of termination multiplied by four and six-tenths (4.6) times the number of barrels remaining unshipped. In case of a rise in such price of such wheat or rye between said dates, seller shall recover the sums specified in (a) and (b), less the amount of such rise per bushel multiplied by four and six-tenths (4.6) times the number of barrels remaining unshipped. Such amount shall be credited to the amounts provided in (a) and (b) solely in reduction of damages.

Provided: That if the default consists of a failure by buyer to provide shipping instructions as required under "Shipments," seller may cancel or terminate the contract as above provided only after giving buyer preliminary written notice of intention to cancel or terminate, by registered mail addressed to buyer's main office. If buyer does not provide the required shipping instructions within eight (8) days after mailing of such notice, then seller may, within fourteen (14) days after the expiration of said eight (8) days, cancel or terminate the contract as above provided.

PROVISION FOR AUTOMATIC EXTENSION: If buyer shall fail to furnish complete shipping instructions (and necessary containers if sale is made on a bulk basis) to reach seller at his main office ten (10) days before the date for any shipment specified herein, or before the final date specified for shipment, as the case may be, and if buyer shall fail to notify seller that he does not intend to accept any further deliveries under this contract, then (unless seller elects to exercise his right to cancel or terminate the contract) this contract, as to such shipment, or shipments, shall without notice automatically be extended from day to day until buyer furnishes complete shipping instructions (and necessary containers if sale is made on a bulk basis) in accordance with the provisions of paragraph entitled, "Shipments," or until buyer notifies seller that he does not intend to accept any further deliveries under this contract, or until seller exercises his right provided herein to cancel or terminate the contract; and for each day during which the contract is thus automatically extended buyer will pay seller carrying charges at the rate of one-sixth (1/6c) cent per barrel per day.

LIMITATION OF ACTIONS: No action at law or in equity shall be maintained by buyer against seller or any of seller's other vendees to recover damages for alleged violation by seller or said vendee of any law, federal or state, now in effect or hereafter enacted, pertaining to discrimination in price, services or facilities including the Clayton Act (U. S. C. title 15, secs. 12 to 27 inclusive) as amended by Act of Congress approved June 19, 1936, or any further amendment thereto, as respects any products delivered by seller to buyer pursuant to this contract unless (1) written notice of the particular deliveries on which the claim for such damages is based shall be given by buyer to seller at seller's main office by registered mail within six (6) months after delivery thereof to buyer with a full statement of the particulars of such claim then known to buyer, and (2) action shall be commenced within one (1) year after delivery of such products to buyer.

STATE WEIGHT AND PACKAGE LAWS

Summary of the laws of the states regarding the weight and packaging of flour, as reported to The Northwestern Miller, Feb. 15, 1942.

ALABAMA

Sizes.—Flour (plain or self-rising) may be packed in sacks of 2, 6, 12, 24, 48 and 98 lbs, and barrels of 98 and 196 lbs. No other sizes allowed. Standard barrel, 196 lbs. Flour may be sold at retail in any quantity from bulk stock by merchants.

Label.—Net weight must be stated. Correct name of product must occur on the label. Name and address of manufacturer or person responsible for placing product on market required. Information must be plainly printed or stenciled on package or tag.

ARIZONA

Sizes.—Any size of package legal. Standard barrel 196 lbs.

Label.—Must state net weight, plainly and conspicuously. Name of manufacturer, jobber or seller required.

ARKANSAS

Sizes.—Any size of package legal. Standard barrel is 196 lbs.

Label.—Must state net weight. Name and address of manufacturer or distributor not required, but if given must be correctly stated. If name other than manufacturer is stated, must be preceded by "manufactured for," "distributed by" or equivalent phrase. Information must appear in not less than 8-point type, except on very small packages.

CALIFORNIA

Sizes.—Following packages legal: 196, 98, 49, 24½, 9.8, 4.9 and 2 lbs or less. No other sizes allowed. Standard barrel, 196 lbs.

Label.—Must state net weight. All lettering and figures must be legible and conspicuous. If name on package is not that of real manufacturer, must be preceded by "Packed for" or equivalent phrase.

COLORADO

Sizes.—Any size of package legal. Standard barrel is 196 lbs.

Label.—Must state net weight. Name and address of manufacturer or distributor not required, but if given must be correctly stated. If name other than manufacturer is stated, words "manufactured for," "distributed by" or equivalent phrase must appear. Information must be no smaller than 8-point caps.

CONNECTICUT

Sizes.—Any size of package legal. Standard barrel of flour is 196 lbs.

Label.—Must state net weight. Name and address of manufacturer or distributor required. Name of product required. The required information must appear conspicuously in relation to other material.

DELAWARE

Sizes.—Any size of package legal.

Label.—Must state net weight, plainly and conspicuously.

DISTRICT OF COLUMBIA

Sizes.—Any size of package legal.

Label.—Must state net weight plainly and conspicuously.

FLORIDA

Size.—Any size of package legal.

Label.—Must state net weight, name of product, and name and address of manufacturer or distributor.

GEORGIA

Sizes.—Gross weight of packages must be as follows: Sacks containing 140 lbs, sacks containing 280 lbs, barrels of 196 lbs, ½-bbl sacks containing 98 lbs, ¼-bbl sacks containing 48 lbs, ⅛-bbl sacks containing 24 lbs, 1/16-bbl sacks containing 12 lbs, 1-32-bbl sacks containing 6 lbs. All other sizes prohibited, except that packages of less than 6 lbs may be sold if net weight is clearly stated.

Label.—Must state net weight. Name and address of manufacturer required. Flour containing more than .5 ash must be marked "low grade." Information must be in the same size of type and color as brand name.

IDAHO

Sizes.—All sizes of packages permissible if properly labeled. Standard barrel, 196 lbs; ½ bbl, 98 lbs; ¼ bbl, 49 lbs; ⅛ bbl, 24 lbs; 1/16 bbl, 12 lbs.

Label.—Net weight must be stated. Information must appear in type no smaller than 8-point heavy caps. Name and address of manufacturer or distributor required.

ILLINOIS

Sizes.—Any size of package legal. Standard barrel 196 lbs, ½ bbl, 98 lbs; ¼ bbl, 49 lbs; ⅛ bbl, 24½ lbs.

Label.—Net weight must be stated. Name and address of manufacturer or distributor required. Name of product must appear. Information must be given in type no smaller than 8-point caps and larger for bigger packages.

INDIANA

Sizes.—Any size of package legal. Standard barrel is 196 lbs.

Label.—Net weight must be stated. Name and address of manufacturer or distributor required. Name of product must appear. Information must be given in type no smaller than 8-point.

IOWA

Sizes.—A barrel of flour is 196 lbs, a sack is ¼ bbl or 49 lbs. No flour may be sold as barrel or sack in other weights. Flour may be sold by pound in all sizes of packages.

Label.—Net weight must be stated. Name and address of manufacturer, distributor or dealer required. Information must be given in type no smaller than 8-point heavy caps.

KANSAS

Sizes.—Any size of package legal. Standard barrel is 196 lbs; ½ bbl, 98 lbs; ¼ bbl, 48 lbs; ⅛ bbl, 24 lbs; 1/16 bbl, 12 lbs.

Label.—Must state net weight, plainly and conspicuously.

KENTUCKY

Sizes.—Standard measure of wheat flour shall be packages containing net avoirdupois weights of 2, 6, 12, 24, 48, 96 and 196 lbs. It is unlawful to pack for sale, sell or offer for sale in Kentucky any wheat flour except in bags or packages containing the above standard net weights; provided that this does not apply to retailing of flour direct to the consumer from bulk stock, to the bakery trade, to the exchanging of wheat for flour by mills grinding for toll, nor to wheat products packed and distributed as a specialty in identified original packages of 5 lbs or less.

Label.—Net weight must be stated. Name and address of manufacturer printed or plainly marked on it. Information must be given in letters and figures not less than ⅛ inch high.

LOUISIANA

Sizes.—Any size of package legal. No state law establishing standard barrel.

Label.—Must state net weight. Name of product required. Name and address of manufacturer or packer must be stated.

Registration.—All registrations are required to be renewed annually. The examination and investigation fee has been set at $2.50 for each product registered, with a maximum of $50 for 20 or more products registered by any one manufacturer, packer or distributor. Each different kind or variety of flour, such as plain, phosphated, self-rising, cake or other special flours, like corn, rye, buckwheat, whole wheat, etc., must be registered instead of each brand or type as heretofore; that is, the product "Plain Flour" may be distributed under a number of different "brand" names, but only one fee will be required to register it. However, it is necessary that labels or copies of labels be submitted, at the time application is made for registration, showing the various brand or trade names under which any particular kind or variety of flour will be packed for distribution.

MAINE

Sizes.—Any size of package legal. Standard barrel is 196 lbs.

Label.—Must state net weight, plainly and conspicuously.

MARYLAND

Sizes.—Any size of package legal. Standard barrel, 196 lbs; ½ bbl, 98 lbs; ¼ bbl, 49 lbs; ⅛ bbl, 24½ lbs; 1/16 bbl, 12½ lbs.

Label.—Net weight must be stated, plainly and conspicuously.

MASSACHUSETTS

Sizes.—Any size of package legal. Standard barrel is 196 lbs.

Label.—Net weight must be stated, plainly and conspicuously.

MICHIGAN

Sizes.—Standard barrel is 196 lbs; ½ bbl, 98 lbs; ¼ bbl, 49 lbs; ⅛ bbl, 24½ lbs; 1/16 bbl, 12¼ lbs; 1-32 bbl, 6¼ lbs. Law does not authorize other packages, but there is no objection to sale of packages smaller than 6¼ lbs, if properly marked with net weight.

Label.—Net weight must be stated. If sold as fractions of barrel, packages shall be so marked in addition to the number of pounds thereon. Information must appear in letters and figures not less than ⅛ inch high.

MINNESOTA

Sizes.—Any size of package legal. Standard barrel is 196 lbs; fractional parts must be exact.

Label.—Net weight must be stated. Name of product must appear. Name and address of manufacturer or distributor must appear. Information must be given in type no smaller than 8-point caps.

MISSISSIPPI

Sizes.—Standard barrel of flour, 196 lbs; ½ bbl, 98 lbs; ¼ bbl, 48 lbs; ⅛ bbl, 24 lbs. In addition, attorney general rules that 12, 6 and 2-lb packages only also are legal.

Label.—Net weight must be stated, plainly and conspicuously. Name and address of manufacturer must appear.

MISSOURI

Sizes.—Any size of package legal. Standard barrel is 196 lbs; sack, 98 lbs; half sack, 48 lbs; quarter sack, 24 lbs. Other sizes may not be sold under barrel and sack nomenclature.

Label.—Net weight must be stated. Name and address of manufacturer or vendor required. Information must be printed "in straight parallel of plain, uncondensed and legible type, well-spaced on plain ground.

MONTANA

Sizes.—Any size of package legal.

Label.—Net weight must be stated, plainly and intelligibly in not smaller than 9-point type.

NEBRASKA

Sizes.—Wheat flour may be sold only in packages of 196, 98, 48, 24, 10 and 5 lbs; rye and whole wheat flour 100, 50, 25, 10, 5 and 2½ lbs. No other packages than these may be used, except in the case of "flour prepared for special purposes." Standard barrel is 196 lbs.

Label.—Net weight must be stated. Name and address of manufacturer and place of manufacture must appear. Information must be "clearly printed."

NEVADA

Sizes.—Standard barrel is 196 lbs; ½ bbl, 98 lbs; ¼ bbl, 49 lbs; ⅛ bbl, 24 lbs; 1/16 bbl, 12 lbs. Other sizes permitted if correctly labeled as to net weight and sold under special contract. White flour can be

packed in less than 5-lb packages if the weight is properly stamped on packages.

Label.—Net weight must be stated. Jobber's or manufacturer's name and address required. If jobber's name, must be preceded by "packed for" or equivalent phrase. Information must be "plain and intelligible."

NEW HAMPSHIRE

Sizes.—Any size of package legal.

Label.—Net weight must be stated, plainly in large type, on each package.

NEW JERSEY

Sizes.—Any size of package legal.

Label.—Net weight must be stated, plainly and conspicuously; also, name and place of business of the manufacturer, packer or distributor.

NEW MEXICO

Sizes.—Any size of package legal.

Label.—Net weight must be stated in letters at least one inch high.

NEW YORK

Sizes.—Any size of package legal, but if in wooden barrels must be 196 lbs or 98 lbs.

Label.—Net weight must be stated. If packages contain less than 10 lbs, information must appear in bold-faced letters at least one-ninth inch high; if from 10 to 100 lbs, the letter must be at least ¼-inch boldface; if over 100 lbs, letters must be ⅛-inch boldface. Name and address of manufacturer is required and state of manufacture must not be falsely represented. Phrase "when packed" prohibited.

NORTH CAROLINA

Sizes.—Standard barrel is 196 lbs. Package sizes limited to 196 lbs, 98 lbs, 48, 24, 12, 6, 3, 2½, 2, 1½ and 1 lb. No other sizes permitted. This does not apply to retailing from bulk stock.

Label.—Net weight must be stated. Name and address of manufacturer or vendor required.

NORTH DAKOTA

Sizes.—Any size of package legal. Standard barrel is 196 lbs; fractional parts must be exact.

Label.—Net weight must be stated legibly. Name and address of manufacturer, jobber or person responsible for placing product on market must appear. Label must show approximate percentage of each kind of wheat used, state where grown, and percentage of protein in flour.

OHIO

Sizes.—Any size of package legal. Standard barrel, 196 lbs; ½ bbl, 98 lbs; ¼ bbl, 49 lbs; ⅛ bbl, 24½ lbs; 1/16 bbl, 12¼ lbs.

Label.—Net weight must be stated, plainly and conspicuously. Name of product required. Name and address of manufacturer or distributor must appear; in addition thereto, the name and address of distributor may be used.

OKLAHOMA

Sizes.—Standard weights: barrel in wood, 196 lbs; ½ bbl in wood, 98 lbs; ¼ bbl, in sacks, 48 lbs gross; ⅛ bbl in sacks, 24 lbs gross. No legal prohibition or authorization for other sizes, but various sizes sold and regarded as legal if properly marked as to net weight.

Label.—Net weight must be stated. Name of product must appear; mixed or blended flour must be marked "flour compound," with name of manufacturer and location of plant. Name of product must be in letters at least 2 inches high and ¼ inch wide.

OREGON

Sizes.—Standard barrel, 196 lbs; ½ bbl, 98 lbs; ¼ bbl, 49 lbs; ⅛ bbl, 24½ lbs. Standard weight of a bale of flour is 98 lbs, or 10 sacks weighing 9.8 lbs net each. It is unlawful to sell other sized packages.

Label.—Net weight must be stated, plainly and conspicuously. Phrase "net weight when packed" not allowed.

PENNSYLVANIA

Sizes.—Any size of package legal.

Label.—Net weight must be stated. Tolerances provided by law. Information must appear in not less than 8-point (Brevier) caps, so as to be "plainly seen and read." In cases of packages too small to use this type, size may be reduced proportionately.

Name and address of manufacturer or distributor required. Manufacturer's name must be preceded by the words, "manufactured by" or "packed by," or followed by "manufacturer" or "packer." Distributor's name must be preceded by the words, "distributed by" or "packed for," or followed by "distributor" or "wholesale dealer." Other terms not allowed. Dealers and distributors whose names appear on packages must maintain for five years a record of the name and address of the manufacturer of each shipment, and their goods must carry a code mark in order to identify the manufacturer of any given package.

RHODE ISLAND

Sizes.—Any size of package legal provided package is full.

Label.—Net weight must be stated, plainly and conspicuously. Name and address of manufacturer and place of manufacture not required, but if given must be correctly stated. Words "packed for," "distributed by" or equivalent, must precede name of distributor, if given.

SOUTH CAROLINA

Sizes.—Law fixed following net weights: wood barrel, 196 lbs; wood ½ bbl, 98 lbs; 1-bbl sack, 192 lbs; ½-bbl sack, 96 lbs; ¼-bbl sack, 48 lbs; ⅛-bbl sack, 24 lbs; 1/16-bbl sack, 12 lbs; 1-32-bbl sack, 6 lbs. Packages of less than 6 lbs may be sold in any size, provided the correct net weight is shown. No other weights permitted. Net weights contained in package shall be plainly marked on head, top or side of barrel or package with stencil or paper label.

Label.—Letters and figures must be not less than 1 inch in length.

SOUTH DAKOTA

Sizes.—Legal weights 196, 149, 98, 49, 24½, 10 and 5 or less. All others prohibited. Standard barrel, 196 lbs.

Label.—Each and every package, container, sack or barrel shall bear upon the outside thereof, conspicuously printed directly on it, a legible and plainly written or printed, label which will state the brand or trade-mark, name and address of manufacturer, place where manufactured, percentage of each kind of wheat used and state where grown, as well as percentage of protein. Net weight must be stated.

TENNESSEE

Sizes.—Lawful flour packages: 196, 140, 98, 96, 48, 24, 12, 6 and 3 lbs. All other sizes prohibited, except that buckwheat flour, whole wheat flour, pancake flour, prepared biscuit flour and cake flour in packages of 5 lbs or less are exempt. Does not apply to retailing from bulk stock.

Label.—Net weight must be stated, plainly and conspicuously. All flour sold must conform with the labeling provisions as set forth under the Federal Food, Drug and Cosmetic Act.

TEXAS

Sizes.—Package sizes limited to 196, 140, 98, 48, 24, 12, 6 and 3 lbs. All other sizes prohibited, except prepared pancake flour, cake flour or other specialty, packed and distributed in identified original package of 5 lbs or less. Standard barrel is 196 lbs.

Label.—Net weight must be stated, plainly and clearly readable. The name and address of the manufacturer (meaning person, firm, association or corporation which processes the cereal into flour) and the name of the place where milled must appear.

Law does not apply to flour sold to bakeries, exchanged for wheat, or sold at retail from bulk stock.

Registration.—All manufacturers of food doing business in Texas and all such persons, firms, corporations, who import or bring into the state of Texas and offer for sale or distribution from any place not a part or possession of the United States any article of food, shall register with the director, Food and Drug Administration, State Board of Health, annually on or before Sept. 1. The fee is $1. Courts have held this does not apply to interstate transactions. Food and Drug Law, Art. 4469.

UTAH

Sizes.—Any size of package legal. Standard barrel is 196 lbs.

Label.—Net weight must be stated in letters large enough to be clearly and legibly read. Name and address of manufacturer or distributor must appear.

VERMONT

Sizes.—Any size of package legal.

Label.—Net weight must be stated, plainly and conspicuously. Name and address of manufacturer or distributor not required, but if given must be correctly stated. If distributor is named, must be preceded by "packed for," "distributed by" or equivalent phrase.

VIRGINIA

Sizes.—Packages limited to 6, 12, 24, 48, 98 and 196 lbs, as well as packages of 3 lbs or less, if properly marked. Whole wheat and buckwheat flours may be packed in any sizes.

Label.—Net weight must be stated, plainly. Name of product must be given. Name and address of manufacturer or distributor must appear.

WASHINGTON

Sizes.—Any size of package legal.

Label.—Net weight must be stated. Name of product must be given. Name of manufacturer and place of manufacture must appear. Information must be placed so as to be readily seen and clearly legible.

WEST VIRGINIA

Sizes.—Any size of package legal. Standard barrel, 196 lbs; ½ bbl, 98 lbs; ¼ bbl, 49 lbs; ⅛ bbl, 24½ lbs; 1/16 bbl, 12¼ lbs. Other sizes must not purport to be fractional parts of a barrel.

Label.—Net weight must be stated, plainly and conspicuously.

WISCONSIN

Sizes.—Any size of package legal. Standard barrel is 196 lbs.

Label.—Net weight must be stated, accurately and conspicuously. Name and address of manufacturer, packer or dealer required.

WYOMING

Sizes.—Any size of package legal.

Label.—Net weight must be stated, in conspicuous place and large enough to be readily seen by the buyer. Name and address of manufacturer or distributor required.

Presidents of the New York Association of Flour Distributors

The New York Association of Flour Distributors was formerly the New York Flour Club, which was organized in 1910. The presidents since its organization: S. C. Delevan, 1910-11; W. L. Sweet, Jr., 1912; Richard L. Claybrook, 1913; Samuel Knighton, 1914; F. O. Seaver, 1915; D. G. Van Dusen, 1916; E. O. Challenger, 1917; Charles W. Jewell, 1918; A. V. Dayton, 1919; B. H. Wunder, 1920-21; A. F. Janss, 1922-23; George R. Flach, 1924; John E. Seaver, 1925; R. L. Sweet, 1926; E. F. Siney, 1927-28; Ansel F. Leo, 1929; Joseph V. Lane, 1930-31; Harry C. Lautensack, 1932-34; B. H. Wunder, 1935; George Silver, 1936; Wilson P. Tanner, 1937-38; William E. Derrick, 1939-40; S. R. Strisik, 1941.

Executive officers for 1942: S. R. Strisik, president; Harvey Landau, vice president; Fred W. Colquhoun, treasurer; W. G. Martin, Jr., secretary.

STATE LAWS AS TO FEEDINGSTUFFS

The following summary of the state laws regarding the sale of commercial feedingstuffs has been made on the basis of reports received up to Feb. 15, 1942. Millers and others doing an interstate business in commercial feedingstuffs are advised to communicate with the state officials whose names and addresses are given in this summary.

ALABAMA

Inspection fee, 20c per ton. Registration fee, $2 per year for each brand provided the feed is registered before being sold in the state. The late registration fee, $5 penalty; total, $10 registration fee before the feed can be sold in the state. Annual registrations due Oct. 1. Tax stamps required. Whole seeds and grains, all meals sold for human consumption, unmixed whole hay, straw, cottonseed hulls and corn stover are exempt, but when ground or mixed are subject to the law. Label must show net weight, brand name, name and address of manufacturer, jobber or importer, minimum percentage of crude protein and fat and nitrogen-free extract, maximum percentage of crude fiber, names of ingredients and percentage of each mineral or chemical added. "Adulterants which are prohibited as ingredients of commercial feeds are: rice hulls, oat hulls, cottonseed hulls, peanut hulls, barley hulls, coconut hulls (so-called coconut hull meal), and other hulls of little or no nutritional value, weed seeds, mill oats or wild oats, ground straw, sugar cane bagasse (sugar cane pumice), grit, oyster shell containing less than 95% calcium carbonate, and other materials which have little or no nutritional value." Weight standards: 5 lbs, 8⅓ (when packed 12 to a bale), 10, 25, 50, 100, 150 and 200 lbs. Haygood Paterson, Commissioner of Agriculture and Industries, Montgomery.

ARIZONA

Inspection fee 16c ton. Registration annually, Jan. 1, on all feeds but whole grains and meals. When sold in bulk or buyers' packages, tax stamps must be delivered. Label must show net weight, name and address of manufacturer or person responsible for marketing; brand name; minimum percentages of crude protein and fat; maximum percentage of crude fiber; specific name of each ingredient; mineral feeds W. T. McGeorge, State Chemist, University of Arizona, Tucson.

ARKANSAS

Inspection fee, 10c per ton. No registration fee, but each brand of feeds must be registered, except whole grains, hays and straws. Unadulterated wheat, corn, rye and buckwheat bran, shorts and middlings are exempt from inspection fee. Each bag of commercial feed must have attached thereto a tag showing net weight, brand name, name of ingredients, name and address of manufacturer or jobber, minimum percentages of crude protein, crude fat, carbohydrates and nitrogen-free extract, maximum percentage of crude fiber; standard weights, 5, 8⅓, 10, 25, 50, 75, 100, 125, 150, 175 and 200 lbs. A tax stamp must be attached to each tag, except those on bags of feed that are exempt from inspection fee. Registration permanent. Joe Hardin, Commissioner of Revenues, Little Rock.

CALIFORNIA

Commercial Feedingstuffs Act. License fee of $3 for each additional plant; $3 for each renewal. Licensing required annually before July 1. Covers all feeds except whole seeds or grain, when unmixed; fresh green roughage, and unprocessed liquid milk in all its forms; whole hays, straws, cottonseed hulls, corn stover and wet citrus residue, when unprocessed and unmixed with other materials; wet garbage, and salt except in block or chunk form; and preparations which are sold as or represented to be primarily for the cure or mitigation of disease, and preparations which are sold feeding domestic pets, such as dogs, cats and birds. Requires the payment of a tonnage tax of four cents on each ton, except on materials sold to manufacturers to be used in mixed feed. Payment of tonnage tax must be indicated on the tag, either by the use of tonnage tax stamps or the official tonnage tax paid insignia printed on tags by tag companies or printers authorized to print this official tonnage tax paid insignia. All packages must be labeled to show net weight; brand name; name and address of manufacturer or person placing commodity on market; minimum percentages of crude protein, crude fat; maximum percentages of crude fiber and ash; name of each ingredient; maximum percentage of mineral matter; percentage of corn cobs, corn bran, oat hulls, barley hulls, rice hulls, ground light rice or similar materials; the maximum percentage of mineral matter contained; and in the case of mixed feeds containing more than 5% mineral ingredients, the minimum per cent of calcium (Ca), phosphorus (P), iodine (I), and the maximum percentage of salt if the same be added; and the maximum percentage of salt in any mixed feeds if more than 2% of salt is added. In the case of commercial feedingstuffs for which special qualities are claimed, such as vitamin potency or protein quality, a definite guarantee relative to such quality; provided, however, the director may by rule and regulation permit the deletion of any such guarantees as may not be pertinent to a specific commodity. In cases where simple animal protein concentrates are sold or distributed the quality index of such protein may be certified to in addition to the minimum per cent of crude protein. W. J. Cecil, Director, Department of Agriculture, Sacramento.

COLORADO

Permanent registration at $2 for each brand. Inspection fee 10c ton. All feedstuffs must be registered, except whole seeds and unmixed meals consisting of entire grains of corn, wheat, rye, barley, oats, kafir and milo, or a mixture of any two of the foregoing; whole hays, straws, sugar beet by-products, ensilage and cane molasses when unmixed with other materials; unmixed meal from whole alfalfa; alfalfa stem meal sold to consumer direct; all other materials consisting of 60 per cent or more of water. The label must contain net weight; name, brand, or trade-mark; name and address of person responsible for placing commodity on market; minimum percentage of crude protein, fat, and nitrogen free extract; maximum percentage of crude fiber; specific name of ingredients. Ben H. King, Director of Markets, Denver.

CONNECTICUT

Annual registration by calendar years required; fee, $15 per brand. All feedingstuffs must be labeled unless sold in bulk, when a certificate containing the information otherwise required must be furnished. No wire or metal may be used in affixing tags or labels. The label must show net weight and brand name; name and address of the manufacturer or importer; minimum percentages of crude protein, crude fat, and the maximum percentage of crude fiber; and the name of each ingredient. James B. Lowell, Dairy and Food Commissioner, Hartford, Conn.

DELAWARE

Registration required for each brand; registration fee $1 per year; registration annual. Report of total sales of each brand required on or before Jan. 5 of each year, with payment of tonnage tax of 10c per ton. Each package must be plainly marked with net weight of contents; name, brand or trade-mark; name and address of manufacturer or dealer; minimum percentage of crude protein and crude fat; maximum percentage of crude fiber; specific name of each ingredient. Unmixed wheat, rye and buckwheat brans or middlings not included under law. Ralph C. Wilson, Secretary State Board of Agriculture, Dover.

FLORIDA

Registration annually, Jan. 1. Inspection fee, 25c per ton. Each package must have affixed thereto a tag or label stating the number of net pounds of feed in the package; the name, brand or trade-mark; the name and address of the manufacturer or person responsible for placing the commodity on the market; and the percentages of protein, fat and fiber, and names of ingredients. Each bag or package must bear a tag or stamp showing payment of the inspection fee, such tags or stamps being furnished to manufacturers or dealers by the Commissioner of Agriculture. Percentage of each mineral ingredient included in a mixture shall be stated and the total percentages shall not exceed 5%. Cobalt shall not be declared present if the maximum percentage is less than 1-100 of 1% of the cobalt element. Superphosphate or untreated rock phosphate or phosphorized limestone shall not be used in a mineral feed mixture on account of their fluorine content. Inspection fee stamps issued only for packages of 5, 8⅓ and 10 lbs. Nathan Mayo, Commissioner of Agriculture, Tallahassee.

GEORGIA

Brands must be registered annually, on or before Jan. 1. Registration fee $2 for each brand. Inspection fee, 20c per ton. Stamps to be secured from the state Department of Agriculture and affixed to the tags or labels. Every package must have a tag or label stating net weight, brand name, names of ingredients, name and address of the manufacturer or jobber, and statement of maximum percentage of crude fiber and minimum percentage of crude fat and crude protein, names of ingredients. Standard weights: 50, 75, 100, 125, 150, 175 and 200 lbs. Columbus Roberts, Commissioner of Agriculture, Atlanta.

IDAHO

Registration fee of $1 for each brand required. Fee to be paid annually on or before April 1 to the Commissioner of Agriculture. No inspection fee. All feedingstuffs used in feeding of livestock and poultry require registration, except whole seeds or grains, the unmixed meals made directly from the entire grain of corn, wheat, rye, barley, oats, buckwheat, flaxseed, kafir, milo, peas and beans; whole hays, straws, cottonseed hulls, corn stover; ground or whole mill screenings when unmixed with other materials. Label must show net weight of the contents of the package, lot or parcel; name, brand or trade-mark; name and principal address of the manufacturer or distributor; minimum percentage of crude protein, minimum percentage of crude fat; maximum percentage of crude fiber and specific name of each ingredient used in its manufacture. Materials injurious to health of domestic animals or poultry prohibited. J. B. Newport, Commissioner of Agriculture, Boise, Idaho.

ILLINOIS

Registration fee $25 for each brand or $1 for each brand for each calendar year or portion thereof. If registered under the $1 year plan, a tonnage tax of 10c ton must also be paid. No tax tags required. Tonnage tax is collected semi-annually, June 30 and Dec. 31. Sworn statement of sales must be made at time of payment. Registration must be made annually on or before Jan. 1 or before offering goods for sale. Pure wheat bran and middlings sold separately or mixed together are exempt. Each package must be labeled or branded with a statement showing the net weight of the contents; name, brand or trademark; name and principal address of the manufacturer or person responsible for placing the commodity on the market; minimum percentage of crude protein and crude fat; maximum percentage of crude fiber; name of ingredients. Zean Gassmann, Su-

perintendent Division of Foods and Dairies, 228 South Wabash Avenue, Chicago.

INDIANA

Inspection fee, 16c per ton. The inspection fee is met with by requiring manufacturers to order official tags by submission of certificate of registration properly made out and attested. Registration is not accepted unless a minimum of $5 worth of tags is ordered with the registration. Registration permanent. All packages must have official state chemist's label showing net weight, brand name, name and address of manufacturer, minimum percentages of crude protein and fat, maximum percentage of crude fiber and names of ingredients. Word "manufacturer" is understood to be party registering feed for sale. Tags issued only for 25, 50 and 100-lb packages. When feedingstuffs are sold in packages of 5 lbs or less, in lieu of attaching state labels, the manufacturer may pay an annual registration fee of $20 per brand. In this case the manufacturer's private label must contain the information required by law on the state label. H. R. Kraybill, State Chemist, Purdue University Agricultural Experiment Station, Lafayette.

IOWA

Brands must be registered annually, together with a certified copy of the statement required on the label; registration fee, 50c, and inspection fee, 10c ton, shall be paid semi-annually. For condimental, patented, proprietary or trade-marked feeds the fee is $6 for each brand, each year, with no inspection fee. Label must state net weight of contents; name, brand or trade-mark; name and address of manufacturer or dealer; place of manufacture; chemical analysis, showing percentages of crude protein, crude fat and crude fiber, names of ingredients; if added minerals exceed 5% the label must show the maximum amount of calcium and salt and the minimum per cent of phosphorus and iodine; percentage of calcium carbonate on poultry shells and limestone; wheat by-products included under the law, but if manufactured in Iowa do not require inspection fee. The label may appear either in form of printing on tag or package. Tax tags need not be attached to sacks, but instead a record of the tons of feed manufactured or sold must be kept so that on July 1 and Jan. 1 a statement showing the number of tons of feed sold for the previous six months can be made. Taxed at the rate of 10c per ton. Mark G. Thornburg, Secretary of Agriculture, Des Moines.

KANSAS

Registration required for each brand. Unmixed meals, made directly from and consisting of the entire grains of corn, wheat, rye, barley, oats, buckwheat, flaxseed, kafir and milo, exempt. Inspection tax, 8c per ton, tax tags and stamps to be secured from the secretary of the state board of agriculture. Label on each package must state net weight of contents; name, brand or trademark; name and address of manufacturer; minimum percentage of crude protein and crude fat; maximum percentage of crude fiber; the percentages of nitrogen-free extract; specific name of each ingredient. J. C Mohler, Secretary State Board of Agriculture, Topeka.

KENTUCKY

Inspection fee, 20c ton. Registration permanent or effective until renewals are called for by the department. Kentucky tax tag or label, printed by the department, must be attached to each bag and state: net weight of contents, name of feed, name and address of manufacturer or agent responsible for putting the feed on the market; guaranteed analysis stating minimum percentages of protein and fat and maximum percentage of crude fiber, the specific name of each ingredient, and if a material of little or no feeding value is used, the percentage of same must be given. Standards have been made for many by-product feeds, including wheat feeds, and special purpose mixed feeds. Package sizes: 200, 150, 100, 50 and 25 lbs. Materials solely of a medicinal nature or poisonous, or injurious to health of animals are prohibited. J. D. Turner, head of Feed Department, University of Kentucky, Lexington.

LOUISIANA

Registration required for each brand; registrations are permanent. No registration fee. Inspection fee, 25c per ton, stamps to be attached at shipping point to each package. Label on each package must state net weight of contents; name, brand or trademark; name and address of manufacturer or dealer; minimum percentage of crude protein, crude fats and carbohydrates; maximum percentage of crude fiber; specific name of each ingredient. Minimum percentage of nitrogen-free extract and maximum percentage of crude fiber are bracketed for carbohydrates. No dairy feed containing less than 15% protein, 3% fat, nor more than 15% fiber; no mixed feed containing less than 9% protein, 2% fat, nor more than 15% fiber; no laying mash containing less than 18% protein, 3.50% fat nor more than 8% fiber; no hog feed containing less than 14% protein, 3% fat nor more than 7% fiber,—will be accepted for registration. Special grading for cottonseed meal. Standard weights: 100 lbs net, but poultry feeds may be packed also in sacks of 50, 25, 12½ and 8½ lbs; rice polish and rice bran, 100 and 143 lbs. Harry D. Wilson, Commissioner of Agriculture and Immigration, Baton Rouge.

MAINE

No inspection fee. Registration fee, $10 for each brand, due Jan. 1. Registration certificate must give information required on label. No tax tags required. Label must state net weight, brand name, minimum percentage of protein, fat and maximum percentage of fiber; name and address of manufacturer; name of ingredients; name of any artificial coloring matter used. A. M. G. Soule, Chief Division of Inspection, Augusta.

MARYLAND

License fee, $15 per year for each brand. Registration required but no fee involved for pure wheat bran, pure wheat middlings, pure wheat mixed feed, pure rye bran, pure rye middlings, pure rye mixed feed, pure buckwheat bran, pure buckwheat middlings, pure buckwheat feed, pure corn and oat chop, pure corn bran, and pure corn meal. Annual registrations due Jan. 1. No inspection fee. Label on each package must state net weight of contents; name, brand or trade-mark; name and address of manufacturer or dealer; minimum percentage of crude protein and crude fat; maximum percentage of crude fiber; specific name of each ingredient. L. E. Bopst, in charge of feed inspection, College Park, Md.

MASSACHUSETTS

Annual registrations, including true copy of tag or label, required before Jan. 1. Registration fee, $20 for each brand, not required for whole seeds or grains, also unmixed meals made directly from the entire grains of corn, wheat, rye, barley, oats, buckwheat, flaxseed, kafir and milo, whole hays, whole straws, unground cottonseed hulls, and unground corn, stover, when unmixed with other materials. Label on each package must state net weight of contents; name, brand or trade-mark; name and address of manufacturer or dealer; minimum percentage of crude protein and crude fat; maximum percentage of crude fiber; specific name of each ingredient. If the tag or label contains any claim of one or more dietary factors other than those specified in the act, such tag or label shall bear a legible and plainly printed statement in the English language guaranteeing such claim. Philip H. Smith, Control Service, Amherst, Massachusetts Agricultural Experiment Station.

MICHIGAN

License fee, $20 per brand for wholesale manufacturer's license; $10 per brand for retail manufacturers' license; all feeds not specifically exempt by statute must be licensed. License not required for unmixed whole seeds or grains, unmixed meals made direct from entire grains of corn, wheat, rye, barley, oats; cracked or rolled, screened or unscreened, corn, wheat and oats; whole hays, straws, ensilage and corn stover when unmixed with other materials and liquid by-products from milk returned to farmers from cheese factories, etc. No stamps required. Each package must be labeled, showing net weight, name, brand or trade-mark, name of actual manufacturer and place where manufactured or name and principal address of person responsible for placing commodity on market, minimum percentage crude protein, allowing 1% of nitrogen to equal 6¼% of protein; minimum percentage crude fat, except in case of meat and fish by-products, when actual percentage shall be declared, allowing not more than 1% variation, maximum percentage crude fiber, specific name of each ingredient used in feed manufacture, with percentage of each ingredient present in amount of less than 5%. Special requirements for feeding molasses, semi-solid buttermilk, wet brewers' and distillers' grains and mineral feeds. Leo V. Card, Commissioner of Agriculture, Lansing.

MINNESOTA

Registration including sworn statement covering information given on label, required before feed can be sold; annual registration not required. Manufacturer or dealer must file sworn statement on or before Jan. 31 of each year showing number of net pounds of each brand of concentrated commercial feed sold in the state. Tags must be affixed to each package, sold by state dairy and food commissioner at the rate of 80c for each 100 tags covering 100 lbs each (i. e., 16c per ton), 50c for each 100 tags covering 50 lbs; 30c for each 100 tags covering 25 lbs. Each package must bear tag or label showing net weight of contents; name, brand or trademark; name and address of manufacturer; guaranteed analysis, showing minimum percentage of crude fat and crude protein, and maximum percentage of crude fiber; names of ingredients. Special guaranties required for mineral feeds, salts and vitamin D carriers. R. A. Trovatten, Commissioner of Agriculture, Dairy and Food, St. Paul.

MISSISSIPPI

Registration of brands required annually on Jan. 1. Registration fee $5 for each brand. Registrations are to be filed with commissioner of agriculture, Jackson, and a copy of each registration is to be sent to the State Chemist, State College, Mississippi. No fee for registration with state chemist. Inspection fee, 20c ton, tax stamps to be affixed to each package. Each package must be labeled with tag showing net weight of contents; name, brand or trade-mark; name and address of manufacturer or guarantor; minimum percentage of crude protein and crude fat; maximum percentage of crude fiber; specific name of each ingredient. Tax stamps are distributed by the commissioner of agriculture. Si Corley, Commissioner of Agriculture, Jackson.

MISSOURI

Registration is required for all feedingstuffs, including dog foods, except whole seeds or grains, the unmixed meals made directly from the entire grains of corn, wheat, rye, barley, oats, buckwheat, flaxseed, kafir and milo, whole hays, straws, cottonseed hulls and corn stover, pure corn chops, and pure ground ear corn, when not mixed with other materials and other materials containing 60% or more of water. The registration fee is $2 for each brand for each calendar year or portion thereof. An inspection fee of 8c per ton required (no tax tags or stamps). Every package must be labeled showing (a) net weight of the contents of the package, lot or parcel; (b) name, brand or trade-mark; (c) name and principal address of the manufacturer or person responsible for placing commodity on the market; (d) minimum percentage of crude protein; (e) minimum percentage of crude fat; (f) maximum percentage of crude fiber; (g) minimum percentage of nitrogen-free extract; (h) specific (common) name of each ingredient used in its manufacture. Information (a) to (h) must be furnished on card or cards to purchasers who buy in bulk. Weight standards: 5, 8½, 10, 25, 50, 100, 150 and 200 lbs net. Information may appear either in the form of printing on package or tag attached to package. Materials prohibited are rice hulls, chaff, peanut hulls, dirt, ground or crushed corn cobs, sawdust, weed seeds, the viability of which has not been destroyed except in poultry feeds, more than 5% of mineral substances except in mineral feeds, other materials of little or no feeding value, substances injurious to the health of domestic animals or poultry. On or before Jan. 15 or July 15 of each year statement under oath shall be filed with the department, setting forth the number of tons of feed sold during the preceding six months ending Jan. 1, or July 1, and upon such statement pay the inspection fee of 8c per ton. Any feed, under special rules, ordered for mixing purposes and so verified in writing in each order, may be exempt from the inspection fee when labeled with the name and address of the manufacturer, the brand name, a declaration that such feed is to be used for mixing purposes only and the inspection fee is not to be paid thereon. If any information or statement in addition to that required under the heading, "Information required to appear on packages" is included on the tag or label, such additional matter shall also be included in the application for registration. Commissioner, State Department of Agriculture, Jefferson City, Mo.

MONTANA

Each package must have net weight stated plainly and intelligibly on label. Any statement must be truthful. Commissioner of Agriculture, Helena.

NEBRASKA

No registration fee, but all brands must be registered, only one registration being required unless changes are made in the name of the brand or the formula. Unadulterated wheat, rye and buckwheat bran and shorts subject to registration, but not inspection fee. Tax, 10c per ton, tags to be affixed to each package. Each package must be labeled showing net weight; name, brand or trademark; name and address of manufacturer or dealer; minimum percentage of crude protein and crude fat; maximum percentage of crude fiber; specific name of each ingredient; minimum percentage of nitrogen-free extract; maximum amount of each foreign material ingredient; maximum percentage and kind of material of low feeding value. Tax stamps issued for 10, 25, 50 and 100-lb packages only. Ralph L. Cox, director, Department of Agriculture and Inspection, Lincoln.

NEVADA

No law specifically on the sale of stock foods or feedingstuffs, this being covered in a general way by the state food and drugs law. The weights and measures law requires that each package be labeled with a statement of the net weight. Statements regarding minimum per cent of protein and fat or maximum per cent of crude fiber in the product are not required, but if such statement is made on the label or tag attached to the package the published analysis must be correct within reasonable limits. No registration is required. Sanford C. Dinsmore, commissioner, Division of Food and Drug Control, Reno.

NEW HAMPSHIRE

Annual registration required; registration fee, $15 for each brand. No inspection fee or tags. Label on each package must state net weight of contents; name or trade-mark; name and address of manufacturer or shipper; place of manufacture; minimum percentages of crude protein and crude fat, and maximum percentage of crude fiber; names of ingredients (in bold type) if a compounded feed. Andrew L. Felker, Commissioner Department of Agriculture, Concord.

NEW JERSEY

Annual registration due Jan. 1. Registration fee, 50c per brand. Inspection fee, 8c per ton. Statement of amounts of feed shipped into state must be filed semiannually, July 1 and Jan. 1. All feeds must be registered, except whole grains and unmixed meals of whole grains, whole hays, straws, cottonseed hulls and corn stover. Label must show net weight, brand name, manufacturer's or dealer's name and address, minimum percentages of crude protein and fat, maximum percentage of crude fiber, names of ingredients. No metal tags allowed. Charles S. Cathcart, State Chemist, New Brunswick.

NEW MEXICO

Registration permanent. No fee, but order for $6 worth of tax tags must accompany application. Inspection fee 12c per ton. All feeds must be registered, except whole seeds or grains, whole hays, straws, cottonseed hulls, corn stover, when unmixed with other materials; all other materials containing 60 per cent or more of water. Label must show net weight, name, brand or trademark; name and address of manufacturer or person responsible for placing commodity on market; minimum percentage of crude protein and fat; maximum percentage of crude fiber; percentage of nitrogen free extract; specific names of ingredients. R. W. Ludwick, Deputy in Charge, Feed and Fertilizer Control Office, State College, New Mexico.

NEW YORK

Registration covering information on label required annually before Jan. 1. Registration fee $25 for each brand for wholesalers; $10 for each brand for retailers. All feedstuffs must be registered, except whole grains, roughages, unmixed meals made from whole grains, malt sprouts, unmixed ground or cracked bone, poultry feeds composed of whole or cracked grains, with or without grit, oyster shell or charcoal. Tags are not necessary on light-colored packages upon which the required statement is plainly printed. If tags are used, type must be not smaller than 8-point. Each package must be labeled showing net weight of contents; name, brand or trademark; name and address of manufacturer or dealer; minimum percentage of crude protein and crude fat; maximum percentage of crude fiber if it exceeds 5 per cent; the name of each ingredient; and if any ingredient classified under concentrated commercial feedingstuffs is present in smaller amount than 5 per cent of the whole, the minimum percentum of such ingredient; if artificially colored, the name of the material used for such purpose; percentage of total "roughages," if fiber content exceeds 12 per cent; in case of molasses, minimum percentage of sugar; in case of mineral or inorganic compounds, minimum percentage of each ingredient in amounts less than 5 per cent; in case of meat products with more than 22 per cent of tricalcium phosphate, the word bone must appear in part of brand name. Metal fasteners with sharp points must not be used to attach tags. Holton V. Noyes, Commissioner Department of Agriculture and Markets, Albany.

NORTH CAROLINA

Registration, which is annual, required for each brand; registration fee of $1, payable at the time of registration and thereafter on or before the last day of December of each year, but new registration is necessary when changes are made in brand or formula. Inspection fee, 25c ton, tags to be affixed to each package. Each package must be labeled to show net weight of contents ("provided, that all concentrated commercial feedingstuffs shall be in standard weight bags or packages of 25, 50, 75, 100, 125, 150, 175 and 200 lbs"); name, brand or trade-mark; name and address of manufacturer or jobber or importer; names of each and all ingredients; a guaranty that the contents are pure and unadulterated; maximum percentage of crude fiber; percentage of crude fat, crude protein and carbohydrates, allowing 1% of nitrogen to equal 6¼% of protein, all four constituents to be determined by the official methods of the Association of Official Agricultural Chemists of the United States. Chemical standards for most feeds. Special regulations for cottonseed meal. Use of metal fasteners for tags forbidden. L. M. Nixon, Feed Chemist, Department of Agriculture, Raleigh.

NORTH DAKOTA

Registration, including sworn statement covering information given on label, required before feed can be sold; annual registration not required; mixed meals made from entire grains of wheat, rye, barley, oats, Indian corn, buckwheat or broom corn are not required to be registered. Manufacturer or dealer must file sworn statement on or before Jan. 31 of each year showing number of net pounds of each brand of concentrated commercial feed sold in the state. Tags must be affixed to each package, and are sold by the state food commissioner and chemist at $10 per 1,000 for 100-lb tags, $6 for 50-lb tags, $4 for 25-lb tags, $3 for 24-lb stickers. Mixed poultry feed manufacturers also must pay an annual license fee of $1 and a tax of 50c ton to the N. D. Poultry Improvement Board. Each package must bear tag or label showing net weight of contents; name, brand or trade-mark; name and address of manufacturer; guaranteed analysis, showing minimum percentage of crude fat and crude proteins, and maximum of crude fiber, and a statement of the ingredients from which the feed is compounded; percentages of certain inferior feeds. Mineral feeds must also show the minimum percentage of calcium, phosphorus, iodine, and the maximum percentage of salt. R. O. Baird, Food Commissioner and Chemist, Bismarck.

OHIO

Registration annually by calendar years. Fee $20 per year for each brand for wholesale distribution, $5 per year for each brand for retail distribution only; no inspection fee; all feeds must be registered except hays, straws, whole seeds, whole grains or unmixed meals made from corn, oats, wheat, rye, barley, buckwheat or other whole standard grains. Label must show net weight, brand name, name and principal address of manufacturer or person responsible for placing the commodity on the market; minimum percentage of crude protein, minimum percentage of crude fat, maximum percentage of crude fiber, specific name of each ingredient. Special statement necessary for condimental, mineral and vitamin carrying feeds. John T. Brown, Director of Agriculture, Columbus.

OKLAHOMA

Registration required for each brand; no registration fee; registration permanent unless canceled. All feed, except hay and straw, the whole seed or grains of wheat, barley, rye, oats, Indian corn, rice, buckwheat or broomcorn or any other whole or unground grain or seed, included. Inspection feed, 10c per ton, each package to be tagged with tax tag furnished by State Board of Agriculture. Tax tag must have printed on it statement showing net weight of contents; name, brand or trademark; name and address of manufacturer or importer; minimum percentage of crude protein, crude fat and nitrogen-free extract; maximum percentage of crude fiber; names of ingredients; percentages of substances of little or no feeding value. Manufacturer's guaranteed analysis must correspond with analysis shown on manufacturer's registration form on file with state board of agriculture. Standard weights: 100 lbs net per sack, except poultry feed, which may also be packed in 50, 25 and 10-lb

packages. E. T. Davis, Chief Inspector State Board of Agriculture, Oklahoma City.

OREGON

Annual registration fee of $10 required for each brand. Law includes all feedstuffs, except whole seeds or grains, unmixed meals made from entire grains, unground hays, straws, unground and unmixed screenings, cottonseed hulls, corn stover, oat hulls, feed molasses when unmixed with other materials and all other materials containing 60% or more of water. All millfeeds, including crushed and ground grains, bran and shorts, shall be sold by weight. Tags or stencils on each package must state net weight; name, brand or trade-mark; name and address of manufacturer or dealer; minimum per cent of crude protein and fat; maximum per cent of crude fiber and ash; specific name of each ingredient; in the case of poultry feed, maximum percentage of grit and shell and other mineral matter. J. D. Mickle, Director of Agriculture, Salem.

PENNSYLVANIA

Annual license fee due Jan. 1 or before feeds are offered for sale; $5 charged for tration of old brands is based on number of tons sold during preceding year as follows: below 150 tons $5, 150 to 300 tons $10, 300 to 500 tons $15, over 500 tons $25. If no sworn statement of tonnage sales is made by manufacturer, then brands can be reregistered at $25 each. Pure wheat, rye and buckwheat by-products, pure corn meal made by grinding and bolting corn, and pure corn and oats chop can be registered annually at $5 per bran, no tonnage sales being required. Label on each package must show net weight of contents; brand or trade name; name and address of manufacturer or importer; minimum guaranties for protein and fat; and maximum guaranty for fiber; minimum percentage of total sugar in case of feed molasses; minimum percentage of total solids in case of semisolid buttermilk; statement of composition in the case of by-product feeds and a list of ingredients for mixed feed. Metal fasteners of all kinds prohibited. The use or addition to any feedingstuffs of oat hulls, oat feed, oatmeal mill by-product, clipped oat by-product, flax plant refuse, elevator chaff, cottonseed hulls, ground corn stalks, cocoa shells, coconut shells, is permitted and such feeds will not be considered as adulterated with these materials provided the maximum fiber shall not be found, upon analysis, to exceed 11% plus 10% tolerance, making a total of 12.1%. Anton Roeger, Jr., Director-Chief Chemist, Bureau of Foods and Chemistry, Department of Agriculture, Harrisburg.

RHODE ISLAND

Registration required for each brand; registration fee $10 per year; no inspection fee. All feeds included except unmixed whole seeds or grains, unmixed meals, consisting of entire grains; whole hays, straws, cottonseed hulls, corn stover and silage, when unmixed. Label must show: net weight, name or brand name and address of manufacturer or person placing commodity on market, minimum percentages of crude protein and fat, maximum percentage of crude fiber, name of each ingredient, maximum percentage of salt if over 2 per cent. Special label requirements for mineral feeds. Feeds sold for mixing purposes only exempt from fee. Dr. R. G. Bressler, Director, Department of Agriculture and Conservation, Providence.

SOUTH CAROLINA

Registration required on Jan. 1 annually. Inspection fee 25c ton. All feeds must be registered, except whole grains, hays, straws, cottonseed hulls, and corn stover. Label must show weight of package, name, brand, or trade-mark; name and address of manufacturer, jobber or importer; minimum percentage of crude protein and crude fat; maximum percentage of crude fiber; names of ingredients. Molasses, sugar feeds and poultry scratch feeds must contain at least 9% crude protein; beet pulp and corn bran 8%, corn cho'p 7%. Standard weights: 25, 50, 75, 100, 125, 150, 175 and 200 lbs. Metal fasteners prohibited. Tax stamps required on each package. J. Roy Jones, Commissioner of Agriculture, Commerce and Industries, Columbia, S. C.

SOUTH DAKOTA

Registration required annually on or before July 1 or before goods are offered for sale. Fee $15 for each brand of concentrated commercial feedstuffs sold in packages of 5 lbs or less; $1 plus 15c tonnage tax on all packages of more than 5 lbs; $20 for each brand of mineral deficiency feeds; $25 for each initial registration of brands of livestock remedies; such registration may be renewed annually by payment of fee of $5 provided formula of such remedy has not been changed. Label for commercial feeds must show net weight; name, brand or trade-mark; name and principal address of manufacturer or person responsible for placing commodity on market; minimum percentage of crude protein, and crude fat; maximum percentage of crude fiber; specific name of each ingredient and the actual percentage by weight of any humus, peat, sphagnum moss, mineral, charcoal, shells, or inorganic salts, contained therein; provided that the sum of all percentages of the substances herein named shall not exceed 5% in any concentrated feedingstuff. Special regulations for labeling mineral deficiency feeds and livestock remedies. Information may appear in form of printing on package or tags attached to package; if printed on tags must not be smaller than 10-point for commercial and mineral deficiency feeds or 8-point for livestock remedies. All feeds included except whole grains and meals made therefrom. E. H. Everson, Secretary of Agriculture, Pierre.

TENNESSEE

Registration required for each brand; no fee; registrations permanent. All feeds included except whole grains, hays and corn stover. Inspection fee, 20c per ton. Tax stamps to be affixed to each package or tag. Label on each package must state net weight; brand; name and address of manufacturer; names of all ingredients; percentage of crude fat and crude protein; maximum percentage of crude fiber. Standard weights: 5, 8½, 10, 25, 50, 100 and 140 lbs. V. L. Dugus, Dairy Commissioner and State Chemist, Division of Foods, Fertilizers and Dairies, Nashville.

TEXAS

Registration required for each brand; no registration fee; registrations are permanent. Inspection fee, 10c per ton; tax tags to be affixed to each package. The official tag is the only label recognized, and includes the following information: net weight; brand name; name and address of manufacturer or importer; minimum percentages of protein, fat and nitrogen free extract; maximum percentage of fiber; names of the ingredients, and percentage of each ingredient when rice hulls, peanut shells, corn cobs, oat hulls or other similar substances are present in a mixed feed. All feeds included except whole grains, hay and straw. Standard weights: 5, 6¼, 8⅓, 10, 12½, 16⅔, 25, 50, 75, 100, 125, 133⅓ and 143 lbs. F. D. Fuller, Chief Division of Feed Control Service, College Station.

UTAH

Annual registration required for all brands; registration fee, $4. Fee for change in registration, $1. No inspection fee. All feeds included except whole grains and meals made therefrom or the unmixed feed made directly from and consisting wholly of any one of the following entire grains: corn, wheat, rye, barley, oats, buckwheat, flaxseed, kafir, milo or other seeds or grains. Each package shall have affixed thereto a tag in a conspicuous place on the outside thereof containing a legible and plainly printed statement clearly and truly certifying the net weight of contents; name, brand or trade-mark; name and address of manufacturer or distributor; minimum percentage of crude protein and crude fat; maximum percentage of ash, crude fiber, and maximum percentage of minerals; specific name of each ingredient, using the term as defined by the Association of Feed Control Officials of the United States. David F. Smith, Commissioner, Board of Agriculture, Salt Lake City.

VERMONT

Annual registration required for each brand; registration fee; wholesalers $20, retailers $10. (Retailer is one selling "at a place designated in the license (application) to the ultimate consumer . . . for feeding purposes and not for resale.") All feeds included except whole grains and meals made therefrom. Each package must be labeled, showing net weight of contents; name, brand or trade-mark; name and address of manufacturer or importer; minimum percentages of crude protein and crude fat; maximum percentage of crude fiber; specific name of each ingredient; percentage of weed seed or screenings, except in poultry feeds, provided it exceeds 2%. Use of wire or metal fasteners to attach tags prohibited. J. L. Hills, Director Agricultural Experiment Station, Burlington.

VIRGINIA

No registration fee for concentrated feeds, but for wheat and corn products a registration fee is required ranging from $5 to $20, according to the mill's capacity. Wheat products containing screenings require state inspection tags, and do not come under capacity registration. Registrations for concentrated feeds due annually Jan. 1; for wheat and corn products, annually July 1. Concentrated feeds must have state inspection tags; inspection fee, 15c per ton; wheat and corn products, if not containing screenings, exempt from inspection fee. Label on each package must show net weight of contents; brand; name and address of manufacturer; minimum percentages of protein and fat; maximum percentage of fiber; list of ingredients; guaranty as to purity; standard weights: 10, 25, 50, 100, 140, 150 and 175 lbs. S. S. Smith, Director Dairy and Food Division, Department of Agriculture and Immigration, Richmond.

WASHINGTON

Registration required for each brand; registration fee $6, no inspection fees. Retail dealers must pay license fee of $2. Each package must be labeled, showing net weight of contents; name, brand or trade-mark; name and address of manufacturer or dealer; guaranteed analysis showing minimum percentage of crude fat and crude protein and maximum percentage moisture, maximum percentage of crude ash (not to exceed 12% except in mineral feeds); maximum percentage of crude fiber (not to exceed 10%), and a list of the ingredients from which the concentrated commercial feedingstuff referred to in such list by inclusion of the registered brand name thereof, is compounded. All feeds included except whole grains, hay and meals made therefrom. No screenings allowed in middlings and shorts. Walter J. Robinson, Director of Agriculture, Olympia.

WEST VIRGINIA

Registration required for all feeds, except whole seeds and unmixed meals of entire grains, whole hays, straws, corn stover; all materials containing 60% or more of water. Registration fee for each brand, $5 for state concerns, $15 for out of state concerns. Registration annually on or before July 1. No inspection fee. Label must show net weight; name, brand or trade-mark; name and address of manufacturer or person responsible for placing commodity on market; minimum percentage of crude protein and crude fat; maximum percentage of crude fiber; specific name of each ingredient, with statement of amount or percentage of such ingredients as salt, charcoal, carbonate and phosphate of lime, grit, and such inferior and objectionable materials as commissioner may prescribe; the actual per cent, source and condition of grain screenings used. J. B. McLaughlin, Commissioner of Agriculture, Charleston.

WISCONSIN

Registration required for each brand. Manufacturers or dealers must pay either (a) an annual license fee, due before Feb. 1, ranging from $5 for retailers and $15 for wholesalers, or (b) registration fee of $1 plus a tonnage tax of 5c per net ton based on sworn returns of total amount of feed of each brand sold in the state during the preceding calendar year, no such total tax to be less than $10. All feeds included, except whole grains and meals made therefrom. Each package must be labeled showing net weight; name or brand; manufacturer's name and address; ingredients; minimum percentages of protein, fat and maximum percentage of fiber; special regulations for minerals added. W. B. Griem, Feed Inspection Department, Madison.

WYOMING

Annual registrations required, due Aug. 1. Registration tags required. Each package must bear a tag from Department of Agriculture and a printed label showing net weight of contents; name, brand or trade-mark; name and address of manufacturer or dealer; minimum percentage of crude protein and crude fat; maximum percentage of crude fiber; specific name of each ingredient. All feeds included except whole grains, hay and meals made therefrom. Ralph H. McFarland, Acting Commissioner of Agriculture, Cheyenne.

THE MARKETS UNDER THE DEFENSE PROGRAM

By J. M. Mehl

Chief of the Commodity Exchange Administration of the United States Department of Agriculture

In 1941 the requirements of the national defense program brought the need for more intensive federal supervision of futures trading. The wartime dislocation of supply and demand forces continued to disturb the agricultural futures markets supervised by the Commodity Exchange Administration. Diminished exports of surplus farm products, and the defense adjustments in the farm programs, emphasized the need for corresponding adjustments in the futures markets.

On the one hand, the futures markets faced difficulties in maintaining the volume and liquidity necessary to meet hedging and risk-bearing needs, particularly in the surplus commodities such as grain and cotton. This problem was particularly noticeable in the last half of 1940 when prices and trading activity declined. On the other hand, special measures were necessary to prevent excessive speculation in a number of defense-important commodities, such as fats and oils. This problem became acute in the spring and early summer of 1941 when prices advanced rapidly.

To help meet these problems and make the adjustments necessitated by changing conditions in agricultural marketing, the administration has sought the active co-operation of the exchanges, of processing and trade interests, and the farm organizations. It has acted on the assumption that the futures markets, with proper safeguards and improved controls, will remain open and render continued hedging and risk-bearing services during the emergency, and in the period after the war.

At the beginning of the 1941 fiscal year the futures markets for agricultural commodities were depressed by the turn of the war in Europe. During the previous year prices of many agricultural commodities had advanced sharply, due in part to expectations of large wartime exports of farm products. There had been a corresponding general upward movement in the volume of futures trading. A considerable part of the wartime price advance was canceled by the Nazi conquests in western Europe in the spring and summer of 1940. Grain and cotton prices sagged, and the unfavorable outlook was quickly reflected in the futures markets. The volume of trading in the last half of 1940 declined sharply; and considerably smaller use was made of the markets for hedging and risk-bearing purposes. This situation resulted in lower fiscal year figures, particularly for surplus agricultural commodities, despite an increase in the volume of trading in the spring of 1941. As shown in table 1, transactions in wheat futures declined 43% compared with 1940, and in cotton 23%. The dollar value of trading in all commodities under the act declined from approximately $10,750,000,000 in the 1940 fiscal year to about $8,000,000,000 in 1941.

Futures trading in the spring and early summer of 1941 was in considerable contrast to the situation in the last half of 1940. Farm commodity prices, which in the fall and winter months responded only slowly to increasing consumption, advanced briskly during the spring in response to the 85% of parity legislation, and accelerated defense buying. Most of the advance in the index of farm prices, which increased from 95 to 118 during the year, occurred in these months. The volume of futures trading in most commodities was generally larger than in any other period of the year. The turnover in fats and oils reached the highest levels on record.

Table 2 shows open contracts for the fiscal years 1938-41, indicating the average level of traders' outstanding commitments during these years. For the 1941 fiscal year as a whole, open contracts in most commodities were lower than in 1940. In all of the principal commodities except grains and wool tops, traders' commitments increased substantially in the spring of 1941, in response to higher prices and larger movement of commodities into commercial channels.

Dealers, processors and distributors continued to make substantial use of the futures market for hedging and risk-bearing purposes. Although open contracts in surplus commodities declined sharply during the year the percentage of commitments held by dealers and processors seeking price protection on actual commodity holdings was relatively stable as compared with prior years. The loan programs contributed to restrict trading in grain and cotton, particularly in the last half of 1940. In some of the smaller markets, merchandisers and processors encountered difficulties in placing their hedging commitments. This situation was ameliorated somewhat in the spring of 1941 with the increase in trading.

(Continued on page 61.)

TABLE 1—VOLUME AND ESTIMATED DOLLAR VALUE OF FUTURES TRADING, BY COMMODITIES, FISCAL YEARS 1940-41

	Volume of futures trading		Estimated value of futures trading	
Commodity—Unit—	1940	1941	1940	1941
Wheat, 1,000 bus	8,374,956	4,783,860	$6,565,965,000	$4,042,362,000
Corn, 1,000 bus	1,391,870	795,829	779,447,000	525,247,000
Oats, 1,000 bus	431,436	248,479	154,886,000	89,204,000
Rye, 1,000 bus	409,297	266,248	228,797,000	135,254,000
Barley, 1,000 bus	11,564	2,820	6,083,000	1,402,000
Flaxseed, 1,000 bus	23,844	29,606	45,470,000	49,975,000
Soybeans, 1,000 bus	118,183	611,447	118,538,000	615,116,000
Grain sorghums, 1,000 bus	*.....	.....	*.....	.....
Cotton, 100 bales	445,613½	342,579	2,190,190,000	1,810,520,000
Wool tops, 1,000 lbs	184,635	122,805	194,421,000	146,506,000
Butter, car lots	17,725	21,556	93,384,000	127,929,000
Eggs, car lots	49,271	46,903	108,376,000	114,593,000
Potatoes, car lots	145	250	100,000	153,000
Millfeeds, tons	498,600	668,150	9,294,000	12,327,000
Cottonseed oil, 1,000 lbs	2,437,650	3,319,170	159,666,000	233,670,000
Cottonseed meal, tons	845,400	577,200	23,037,000	15,123,000
Soybean meal, tons	†.....	361,200	.....	9,882,000
Lard, 1,000 lbs	1,506,650	2,420,700	91,755,000	153,258,000
Tallow, 1,000 lbs	6,600	3,600	333,000	185,000
Soybean oil, 1,000 lbs	‡.....	4,800	.....	302,000
Totals	.....	.....	10,769,742,000	8,082,950,000

*Trading amounted to 3,500 bus. Estimated value, $4,025. †Trading began July 8, 1940. ‡Trading began Sept. 3, 1940.

TABLE 2—AVERAGE DAILY OPEN CONTRACTS FOR PRINCIPAL COMMODITIES, ALL CONTRACT MARKETS, FISCAL YEARS 1938-41

Commodity—Unit—	1938	1939	1940	1941
Wheat, 1,000,000 bus	129.0	123.2	120.8	80.7
Corn, 1,000,000 bus	48.4	56.3	40.8	24.3
Oats, 1,000,000 bus	24.1	15.8	16.2	12.0
Rye, 1,000,000 bus	6.5	8.1	14.9	17.1
Barley, 1,000,000 bus	.9	.7	.6	.3
Flaxseed, 1,000,000 bus	.9	.6	1.1	1.5
Soybeans, 1,000,000 bus	....	....	....	*10.0
Cotton, 1,000,000 bales	†3.2	2.4	2.0	1.4
Wool tops, 1,000,000 lbs	....	‡6.6	10.8	7.6
Butter, 1,000 car lots	.9	.7	1.0	1.9
Eggs, 1,000 car lots	2.0	2.5	2.3	1.8
Millfeeds, 1,000 tons	¶28.9	28.2	30.0	40.0
Cottonseed meal, 1,000 tons	....	....	....	$25.3
Soybean meal, 1,000 tons	....	....	....	$46.7
Cottonseed oil, 1,000,000 lbs	....	....	....	‖165.5
Lard, 1,000,000 lbs	....	....	....	‖141.3

*Average for 169 trading days. †Average for 223 trading days. ‡Average for 268 trading days. ¶Average for 225 trading days. §Average for 89 trading days. ‖Average for 84 trading days.

DEFINITIONS AND STANDARDS OF IDENTITY FOR FLOUR

THE Federal Food, Drug and Cosmetic Act, passed in 1938, includes a Definition and Standard of Identity for Wheat Flour. For many years it was a responsibility of the Secretary of Agriculture, to provide standards for flour, according to the Federal Food and Drug Act of 1906. The standards thus established were informal and without the force and effect of law.

When the new Federal Food, Drug and Cosmetic Act became a law in 1938, it authorized the Secretary of Agriculture to conduct hearings and establish definitions and standards for food products. The U. S. Food and Drug Administration called its first meeting to discuss a new definition and standard of identity for flour and other mill products on March 28, 1939. The milling industry was represented and co-operated with government officials in the formulation of the standards.

The progress of the work was interrupted at the time of the reorganization of government departments in 1940, when the Food and Drug Administration was transferred from the Department of Agriculture to the new Federal Security Agency. Later in the year, millers requested that the standards include enriched flour, which necessitated further investigation and hearings and another delay.

The tentative standards were published in May, 1941, and became effective on Jan. 1, 1942.

The definition recognizes four common or usual names, any of which may be used; namely, white flour, flour, wheat flour, or plain flour. Flour "is the food prepared by grinding and bolting cleaned wheat other than durum wheat and red durum wheat." The definition states that flour must be freed of bran coat and germ so that the total ash content shall not exceed a set amount as determined by definite cereal chemistry procedure. Provision is also made for bleaching and aging flour with any of five named bleaching ingredients. Moisture content of the flour shall not exceed 15%.

The standard also provides for proper labeling of the flour.

The requirements for enriched flour are exactly the same as for plain flour with provision for vitamin and mineral additions as follows: "It contains in each pound not less than 1.66 milligrams and not more than 2.5 milligrams of vitamin B_1, not less than 1.2 milligrams and not more than 1.8 milligrams of riboflavin, not less than 6 milligrams and not more than 24 milligrams of nicotinic acid or nicotinic acid amide, not less than 6 milligrams and not more than 24 milligrams of iron (Fe)."

After publication of the standards, it was found that the availability of riboflavin was so limited that millers could not secure it. Consequently, the effective date of that provision of the standard was postponed until July 1, 1942.

Because of the general objection to the name "nicotinic acid," on Jan. 19, 1942, the term "niacin" was substituted as the official and proper name for that vitamin.

A total of 16 wheat products are covered by the flour standards. Other products included are: bromated flour; enriched bromated flour; durum flour; self-rising flour; enriched self-rising flour; phosphated flour; whole wheat flour; graham flour; entire wheat flour; bromated whole wheat flour; whole durum wheat flour; crushed wheat flour; cracked wheat flour; farina; enriched farina; and semolina.

Following is the complete text of the order setting forth the standards and definitions for flour, including the findings of fact.

In the Matter of a Definition and Standard of Identity for Each of the following Foods: (A) Flour, White Flour, Wheat Flour, Plain Flour; (B) Enriched Flour; (C) Bromated Flour; (D) Enriched Bromated Flour; (E) Durum Flour; (F) Self-Rising Flour, Self-Rising White Flour, Self-Rising Wheat Flour; (G) Enriched Self-Rising Flour; (H) Phosphated Flour, Phosphated White Flour, Phosphated Wheat Flour; (I) Whole Wheat Flour, Graham Flour, Entire Wheat Flour; (J) Bromated Whole Wheat Flour; (K) Whole Durum Wheat Flour; (L) Crushed Wheat, Coarse Ground Wheat; (M) Cracked Wheat; (N) Farina; (O) Enriched Farina; (P) Semolina.

FINAL ORDER

By virtue of authority vested in me by the provisions of the Federal Food, Drug and Cosmetic Act, 52 Stat. 1046, 21 U.S.C., sec. 341 (Supp. V, 1939); the Reorganization Act of 1939, 53 Stat. 561 ff., 5 U.S.C., sec. 133-133r (Supp. V, 1939); Reorganization Plans No. 1 (53 Stat. 1423, 4 F.R. 2727) and No. IV (54 Stat. ..., 5 F.R. 2421); upon the basis of evidence received at the hearings herein; and upon consideration of the exceptions filed against the proposed order issued by the Acting Federal Security Administrator on March 28, 1941 (6 F.R. 1729-1737), the following order is promulgated hereby:

FINDINGS OF FACT

1. The food commonly and usually known as "flour," "white flour," "wheat flour," or "plain flour," is manufactured from wheat, both hard and soft, other than durum wheat and red durum wheat.

2. Flour is used primarily for making white bread and biscuit, and consumers of flour normally expect that it will be suitable for these purposes.

3. In making flour the wheat is first cleaned. It is usually tempered. It is then ground and bolted so as to separate the inner portion of the wheat berry, known as the endosperm, from the outer portions, known as the bran coat, or from both bran coat and germ. Flour consists essentially of finely ground endosperm. In the milling process the separation of bran coat and germ from endosperm is never complete, but a certain degree of separation is necessary to produce flour which will make acceptable white bread and biscuit.

4. Where all the flour milled from the wheat used is combined without separation into grades, the flour is called "straight flour." That portion which is most nearly free of bran coat and germ is frequently taken off and sold as "patent flour." The remaining portion, which contains more bran coat and germ than straight flour, is known as "clear flour."

5. "Straight flours" will make acceptable white bread and biscuit. As the degree of removal of bran coat and germ is lessened, flours become progressively less desirable for such purposes until so much bran coat and germ remain that acceptable white bread and biscuit cannot be made. However, such products are suitable for other food uses and are usually sold under such designations as "low grade flour" and "second clear flour." Products containing even more bran coat and germ are sold usually as animal feed.

6. A reasonably accurate criterion of the degree of separation of bran coat, or bran coat and germ, from endosperm is the ash content of the flour, since the ash content of the bran coat is some 20 to 25 times that of the endosperm and the ash content of the germ some 10 to 15 times that of the endosperm.

7. In general, a limit on ash content can be used to distinguish between flours which will make acceptable white bread and biscuit and those which will not, but the limit is not the same for high protein flours (hard wheat flours) and low protein flours (soft wheat flours.) In high protein flours, particularly those used for bread making, a somewhat lesser degree of separation is acceptable than in low protein flours.

8. In most straight flours the per cent of ash is not more than one-twentieth of the per cent of protein and is usually somewhat less.

9. Increased amounts of bran coat and germ which increase the per cent of ash to a point where it exceeds that of straight flour by more than 0.3 result in products which will not make acceptable white bread or biscuit. Products containing more ash than one-twentieth of the protein plus 0.3% are not generally sold in the household trade and are not generally used to make white bread or biscuit.

10. A maximum ash limit of one-twentieth of the protein plus 0.3% will distinguish reasonably effectively between flour suitable for making white bread and biscuits and products not suitable for those purposes.

11. Variation in the moisture content of flour after manufacture causes variations in the per cent of protein and ash. The effect of such variations can be eliminated by calculating the per cent of protein and ash to a moisture-free basis. When such calculation is made the figure 0.35 would be the approximate equivalent of, and should be substitute for, the figure 0.3 in Findings 9 and 10.

12. All flour contains some moisture. Excessive moisture, however, impairs the keeping quality of flour and unnecessarily increases its weight. A reasonable limit for moisture, which is not exceeded in good milling practice, is 15%.

13. Flour is a finely ground product and the degree of fineness is a distinguishing characteristic of flour. Such fineness is secured in good milling practice by bolting the flour through a cloth having openings not larger than those of woven wire cloth designated "149 micron (No. 100)" in table I of "Standard Specifications for Sieves," published March 1, 1940, in L. C. 584 of the U. S. Department of Commerce, National Bureau of Standards.

14. Malted wheat is sometimes mixed with wheat used for making flour, or malted wheat flour or malted barley flour is sometimes added to flour, in small amounts so as to compensate for natural deficiencies of enzymes necessary for bread making. A reasonable maximum limit for malted barley flour so added is 0.25%.

15. A satisfactory and reliable method for the determination of ash content of flour is that prescribed in the book "Official and Tentative Methods of Analysis of the Association of Official Agricultural Chemists," 4th edition, 1935, page 207, under the caption "Method I—Official." This method has recently been republished in the book "Official and Tentative Methods of Analysis of the Association of Official Agricultural Chemists," 5th edition, 1940, page 212, under the caption "Method I—Official." This method is well known and widely used when examining flour for its ash content.

16. A satisfactory and reliable method for determination of moisture in flour is that prescribed in the book, "Official and Tentative Methods of Analysis of the Association of Official Agricultural Chemists," 4th edition, 1935, page 206, under the caption "Vacuum Oven Method—Official." The same method has recently been republished in the book "Official and Tentative Methods of Analysis of the Association of Official Agricultural Chemists," 5th edition, 1940, page 211, under the caption "Vacuum Oven Method—Official." This method is well known and widely used when examining flour for its moisture content.

17. The protein content of flour is ordinarily calculated from the nitrogen content of the flour by multiplying the nitrogen content by 5.7. A satisfactory and reliable chemical method for determination of nitrogen is that prescribed in the book "Official and Tentative Methods of Analysis of the Association of Official Agricultural Chemists," 4th edition, 1935, page 25, under the caption "Kjeldahl-Gunning-Arnold Method—Official." The same method has been recently republished in the book "Official and Tentative Methods of Analysis of the Association of Official Agricultural Chemists," 5th edition, 1940, page 26, under the caption "Kjeldahl - Gunning - Arnold Method—Official." This method is well known and widely used for determining nitrogen in flour.

18. Flour as first prepared is slightly colored by the natural coloring in the wheat. It is a common practice in the milling industry to bleach the flour by treating it with one or more of the following bleaches or bleaching agents:
(1) Oxides of nitrogen,
(2) Chlorine,
(3) Nitrosyl chloride,
(4) Nitrogen trichloride,
(5) Benzoyl peroxide in a carrier consisting of either potassium alum and magnesium carbonate, or a mixture of calcium sulphate and magnesium carbonate, the weight of the carrier being in no case more than six times that of the benzoyl peroxide.

19. Besides the bleaching effect, chlorine, nitrosyl chloride, and nitrogen trichloride have an artificial aging effect on the flour so treated. Only enough of the bleaching agent or agents to accomplish such desired effects is used. Excessive quantities impair the flour.

20. Flour so bleached is whiter than freshly milled unbleached flour, but is similar in color to unbleached flour naturally aged. Since about 1920 it has been prevailing trade practice to label flours treated with bleaching agents as "bleached." Many consumers have come to distinguish between bleached and unbleached flour, and are familiar with and understand the word "bleached" as applied to flour. The word "bleached," as so applied, has become the common name of the ingredients added to the flour through the bleaching process.

21. Some flour of high protein content, to which small amounts of potassium bromate have been added, can be made into dough which is easier to handle and which produces loaves of greater volume than dough made from the same flour to which no potassium bromate has been added. Addition of potassium bromate to flour has been practiced on a small scale, but the practice is increasing. Flour to which potassium bromate has been added is labeled "bromated" and sold exclusively to bakers. The name "bromated flour" is commonly and usually applied to differentiate this product from flour.

22. The amount of potassium bromate added depends on the properties of flour to which it is added, and varies in different crop years. The amount ordinarily used does not exceed 40 parts per million in domestic trade, or 75 parts per million in export trade. An excess of potassium bromate in dough has undesirable effects on bread. A reasonable minimum protein content of the flour used in making bromated flour is 13.5%, which is approximately equivalent to 15% when calculated to a moisture-free basis.

23. The food commonly and usually known as "self-rising flour," "self-rising white flour," or "self-rising wheat flour," is prepared by intimately mixing flour, a leavening agent, and salt for seasoning.

24. The leavening agent usually consists of a mixture of sodium bicarbonate and monocalcium phosphate. Sodium acid pyrophosphate, an acid salt of somewhat less neutralizing value than monocalcium phosphate, is sometimes substituted for monocalcium phosphate.

25. When self-rising flour is used in baking, carbon dioxide gas is evolved through the chemical reaction of the sodium bicarbonate and the acid leavening ingredient. The gas so evolved leavens or raises the dough, giving the baked product one of its characteristic qualities. To accomplish this satisfactorily a certain minimum amount of carbon dioxide must be evolved. The amount of carbon dioxide gas which will be effective for the purpose of proper leavening is not less than 0.5% of the weight of the self-rising flour.

26. To avoid discoloration and other undesired characteristics in the baked product, the amounts of sodium bicarbonate and acid leavening ingredient must be so proportioned that no sodium bicarbonate remains unacted upon in the baked product. Unnecessarily large amounts of the leavening substances leave objectionable quantities of residues in the baked product. A reasonable maximum limit for the leavening agents in self-rising flour is four and one half parts to each hundred parts of flour.

27. A satisfactory and reasonably accurate method for determining the amount of carbon dioxide evolved from self-rising flour is the method prescribed in "Official and Tentative Methods of Analysis of the Association of Official Agricultural Chemists," 5th edition, 1940, beginning on page 186 under "Gasometric Method with Chittick's Apparatus—Official," except that the following procedure is substituted for the procedure specified therein under "6—Determination":

Weigh 17 grams of the official sample into flask A, add 15-20 glass beads (4-6 mm. diameter) and connect this flask with the apparatus (fig. 22). Open stockcock C and by means of the leveling bulb E bring the displacement solution to the 25 cc. graduation above the zero mark. (This 25 cc. is a partial allowance for the volume of acid to be used in the decomposition.) Allow the apparatus to stand one to two minutes to insure that the temperature and pressure within the apparatus are the same as those of the room. Close the stopcock, lower the leveling bulb somewhat to reduce the pressure within the apparatus, and slowly run into the decomposition flask from burette F 45 cc. of sulfuric acid (1+5). To prevent the liberated carbon dioxide from escaping through the acid burette into the air, keep the displacement solution in the leveling bulb at all times during the decomposition at a lower level than that in the gas-measuring tube. Rotate and then vigorously agitate the decomposition flask for three minutes to mix the contents intimately. Allow to stand for 10 minutes to bring to equilibrium. Equalize the pressure in the measuring tube by means of the leveling bulb and read the volume of gas from the zero point on the tube. Deduct 20 cc. from this reading (this 20 cc. together with previous allowance of 25 cc. compensates for the 45 cc. acid used in the decomposition). Observe the temperature of the air surrounding the apparatus and also the barometric pressure and multiply the number of cc. of gas evolved by the factor given in Table 24—Chapter XLIII for the temperature and pressure observed. Divide the corrected reading by 100 to obtain the apparent per cent by weight of carbon dioxide in the official sample.

Correct the apparent per cent of carbon dioxide to compensate for varying atmospheric conditions by immediately assaying a synthetic sample by the same method in the same apparatus.

Prepare the synthetic sample with 16.2 grams of flour, 0.30 gram of monocalcium phosphate, 0.30 gram of salt, and a sufficient quantity of sodium bicarbonate U.S.P. (dried over sulfuric acid) to yield the amount of carbon dioxide recovered in assay of official sample. Determine this quantity by multiplying weight of carbon dioxide recovered in assay of official sample by 1.91.

Divide the weight of carbon dioxide recovered from synthetic sample by weight of carbon dioxide contained in sodium bicarbonate used.

Divide the quotient into the apparent per cent of carbon dioxide in official sample to obtain per cent carbon dioxide evolved from the official sample.

28. There has recently been placed on the market a self-rising flour containing, in addition to the usual ingredients and in partial substitution for sodium bicarbonate, small amounts of calcium carbonate and light magnesium carbonate. Calcium carbonate and light magnesium carbonate react slowly with the acid ingredient when this self-rising flour is used in baking, but the reaction is incomplete and some calcium carbonate and light magnesium carbonate remain unchanged in the baked product. The method described in Finding 27 for determining the amount of carbon dioxide evolved is unsatisfactory where carbonates other than sodium bicarbonate are present in self-rising flour.

29. The reason for adding the calcium carbonate is to enrich the diet in calcium and increase the ratio of calcium to phosphorus. The reason alleged for adding the light magnesium carbonate is that it tends to preserve in the self-rising flour the fluffiness and free flowing qualities characteristic of freshly milled flour.

30. The probable effects of diversity of enrichment of self-rising flour, and of indiscriminate enrichment of foods, are set forth in Findings 36 and 37. In the amount used in this self-rising flour, 0.176%, and in amounts up to 0.5%, light magnesium carbonate causes no observable change in fluffiness, free flowing qualities, or other properties of the self-rising flour.

31. The flour used in preparing self-rising flour is ordinarily bleached prior to mixing with leavening agents and salt. Sometimes the bleaching agent containing benzoyl peroxide, described in Finding 18, is mixed with the flour along with the leavening agents and salt. Findings 18, 19 and 20 apply also to self-rising flour.

32. Flour and self-rising flour are among the principal items of food of the people of the United States. The average consump-

tion is about 6⅛ oz per person per day. This 6⅛ oz supplies about one fourth of the normal energy requirements of the average person.

33. Recent investigations of the diets of persons in various sections and in various income groups have shown that in many cases the food consumed does not furnish sufficient amounts of certain necessary nutritional elements to maintain health. The deficiencies are more prevalent in the case of persons with low incomes. Such persons usually supply a larger part of their energy requirements from flour and self-rising flour than the average person because of their cheapness as a source of energy.

34. Among the most serious and widespread deficiencies, in children as well as adults, are those of vitamin B_1, riboflavin, nicotinic acid, and iron. Deficiencies of these vitamins tend to occur in the same individuals.

35. A deficiency of calcium exists in certain groups of the population. A deficiency of vitamin D exists in large numbers of infants and children.

36. There have recently been placed on the market flours and self-rising flours enriched with one or more of the nutritional elements referred to above. These flours vary widely in composition. Unless a standard is promulgated which limits the kinds and amounts of enrichment, the manufacturers' selection of the various nutritive elements and combinations of elements on the basis of economic and merchandising considerations is likely to lead to a great increase in the diversity, both qualitative and quantitative, in enriched flours offered to the public. Such diversity would tend to confuse and mislead consumers as to the relative value of and need for the several nutritional elements, and would impede rather than promote honesty and fair dealing in the interest of consumers.

37. In general, indiscriminate enrichment of foods (including flour and self-rising flour) with vitamins and minerals would tend to confuse and mislead consumers by giving rise to conflicting claims regarding the beneficial effects of such substances, and would be likely to lead to the impression on the part of consumers that a single article of food so enriched would meet all nutritional needs.

38. Limited enrichment of selected staple foods, on the other hand, is readily adapted to the promotion of consumer understanding of the relative value of enriched and natural foods, utilizing such education as consumers have received regarding the nutritive value of natural foods.

39. Essential food elements, now present only in insufficient quantities in many diets, which are present in wheat in considerable quantity, are vitamins of the B complex and iron. Iron (or compounds of iron) and the following vitamins of the B complex are available and suitable for the enrichment of flour and self-rising flour, either in the form of synthetic products or isolated from wheat by slight changes in the process of milling flour: vitamin B_1, riboflavin, nicotinic acid or nicotinic acid amide.

40. Vitamin D and calcium are now used singly to a limited extent in the enrichment of flour and self-rising flour. Consumer education has generally recommended dairy products as the most desirable source of calcium, and milk as the product most suitable for enrichment with vitamin D in the light of known deficiencies of this element. The addition, however, of vitamin D and calcium as optional ingredients to an enriched flour or enriched self-rising flour will serve a useful purpose for the benefit of persons who do not consume sufficient dairy products.

41. Enrichment of flour or self-rising flour with vitamin A or vitamin C would be unsatisfactory for the reason, among others, that these vitamins are likely to decompose in flour.

42. Stabilized wheat germ oil has been proposed as an optional ingredient of flour for the purpose of increasing the vitamin E content of the flour and for its flavor. The need for the enrichment of foods with vitamin E has not been established. The evidence does not establish that wheat germ oil or stabilized wheat germ oil, in the quantity proposed, has an appreciable effect on the flavor.

43. Pending experience with the use of enriched flour and enriched self-rising flour, consumer education and understanding will be facilitated by restricting the enrichment, not only with respect to the ingredients to be contained therein, but also by the fixing of minimum and maximum amounts of such ingredients. Reasonable limits for this purpose are, for each pound of flour or self-rising flour: not less than 1.66 milligrams nor more than 2.5 milligrams of vitamin B_1, not less than 1.2 milligrams nor more than 1.8 milligrams of riboflavin, not less than 6 milligrams nor more than 24 milligrams of nicotinic acid or nicotinic acid amide, not less than 6 milligrams nor more than 24 milligrams of iron (Fe), not less than 250 U.S.P. units nor more than 1,000 U.S.P. units of vitamin D, and not less than 500 milligrams nor more than 2,000 milligrams of calcium (Ca).

44. Wheat germ, in its natural form or processed to remove part of its oil, is a suitable ingredient for furnishing a part of the requirements for vitamin B_1, riboflavin, nicotinic acid, and iron, but amounts greater than 5% in flour or self-rising flour impair the color of the baked product and make it difficult to produce acceptable bread.

45. Iron has been added to flour in the form of harmless and assimilable salts (other harmless and assimilable forms of iron would serve as well). Various harmless and assimilable salts of calcium, including the phosphates, have been used. The use of any of the calcium phosphates results in the introduction of phosphorus in addition to that naturally present in flour, but such introduction is harmless and is thought by some persons to be desirable. Vitamin D has been added to flour as a concentrate of vitamin D in a food oil. When vitamins and iron are added to flour or self-rising flour, their bulk is so small that the use of a carrier facilitates their intimate and uniform admixture with the flour.

46. Vitamin B_1 in flour and self-rising flour is subject to some loss during baking; the degree of loss increases as the dough decreases in acidity or becomes alkaline. The danger of loss is great when consumers use soda in baking. The addition of monocalcium phosphate safeguards against such losses.

47. Flour and self-rising flour enriched with vitamins and minerals have not acquired common or usual names; accurate designations for these products are "enriched flour" and "enriched self-rising flour."

48. The reasons for enriching flour with vitamins and minerals are equally applicable to bromated flour. Bromated flour so enriched has not acquired a common or usual name; an accurate designation for this product is "enriched bromated flour."

49. The food commonly and usually known as "durum flour" is manufactured from durum wheat. Durum flour is not ordinarily used for making bread or biscuit, but is used for making macaroni and noodles. The purchaser of durum flour expects that it will be suitable for these purposes.

50. Except as above stated the method of preparation of durum flour is the same as that described in Finding 2 with respect to flour. Finding 6 is applicable to durum flour.

51. The characteristics of durum wheat do not vary to an extent comparable to the variation between hard and soft wheats used for making flour, and a fixed ash limit is satisfactory for distinguishing between durum flours which will make acceptable macaroni and noodles and those which will not. A reasonable ash limit is 1.3%, or 1.5% when calculated to a moisture free basis.

52. Findings 12, 13, 15, and 16 are applicable to durum flour.

53. A food is prepared and widely sold in certain parts of the United States consisting of a mixture of flour and monocalcium phosphate, sometimes with the addition of dicalcium phosphate.

54. The primary reason for adding the monocalcium phosphate is to have an excess of acid reacting material in the dough when such flour is used with soda and sour milk for making biscuit. Dicalcium phosphate also increases the acid reacting material, but it is far less effective for this purpose than monocalcium phosphate, and the primary reason for adding it is to enrich the diet in calcium. The probable effects of diversity of enrichment of flour, and of indiscriminate enrichment of foods, are set forth in Findings 36 and 37.

55. Small amounts of monocalcium phosphate will not accomplish the purpose of such addition; too much is likely to impart an undesirable acid taste to products made from such flour. Reasonable limits for monocalcium phosphate are a minimum of 0.25% and a maximum of 0.75% of the weight of the phosphated flour.

56. Flour to which monocalcium phosphate has been added is commonly labeled "flour —calcium phosphate added." The names "phosphated flour," "phosphated white flour," and "phosphated wheat flour" are commonly and usually applied to differentiate this product from flour.

57. The flour used in preparing phosphated flour is ordinarily bleached prior to mixing with the monocalcium phosphate. Sometimes the bleaching agent containing benzoyl peroxide, described in finding 18, is mixed with the flour along with the monocalcium phosphate. Findings 18, 19 and 20 apply also to phosphated flour.

58. The three foods commonly and usually known as (1) "whole wheat flour," "graham flour," or "entire wheat flour"; (2) "cracked wheat"; (3) "crushed wheat" or "coarse ground wheat," are all made by grinding, cracking or crushing wheat other than durum wheat or red durum wheat. Consumers generally expect these foods to contain the constituents of the whole wheat berry, other than moisture, in their natural proportions, although in some cases some of the finer material (largely endosperm and germ) or the coarser material (largely bran) is removed, the product often being labeled to show such removal.

59. In the manufacture of these foods the wheat is first cleaned, and is sometimes tempered. Each of these foods contains some moisture. Excessive moisture, however, impairs the keeping qualities and unreasonably increases the weight of these foods. A reasonable limit for moisture, which is not exceeded in good manufacturing practice, is 15%.

60. Food products made from the entire wheat berry vary widely in the size of particles. They also vary in the character and shape of the particles, depending on whether the products are made by a grinding or crushing process or by a cracking or cutting process. A ground or crushed product, even though coarsely ground, contains a substantial amount of fine particles. A cracked or cut product, although it may contain some fine particles, consists chiefly of angular fragments of substantially uniform size.

61. The most finely ground of these products is commonly and usually known as "whole wheat flour," "graham flour," or "entire wheat flour." This product is commonly used for making whole wheat bread, and the purchaser expects it to be suitable for that purpose.

62. In order to make whole wheat bread, whole wheat flour must be of a certain degree of fineness. Reasonable limits for the degree of fineness for this purpose are that at least 90% of the whole wheat flour pass through a No. 8 sieve and at least 50% of it pass through a No. 20 sieve. Most, though not all, products now sold under the name "whole wheat flour" comply with such a limitation.

63. Malted wheat is sometimes mixed with wheat used for making whole wheat flour, or malted wheat flour or malted barley flour is sometimes added to the whole wheat flour, in small amounts so as to compensate for natural deficiencies of enzymes necessary for bread making. A reasonable maximum limit for malted wheat flour so used is 0.5%, and for malted barley flour so used is 0.25%.

64. In the process of milling of whole wheat flour, the particles of endosperm sometimes are separated from the ground particles of bran coat and germ of the wheat, and subsequently recombined. In such cases the particles of endosperm are sometimes treated with nitrogen trichloride, chlorine, or a mixture of nitrosyl chloride and chlorine to obtain bleaching and artificial aging effects. Only enough of these agents is used to bring about these effects. Whole wheat flour so treated is labeled "bleached."

65. Products coarser than whole wheat flour, while not suitable for use as the primary ingredient in making bread, are used with flour or whole wheat flour to make special kinds of bread, often designated "cracked wheat bread" and "crushed wheat bread." They are also used to some extent as breakfast foods or an ingredient of certain breakfast foods. In order to be suitable for these purposes the products must be of a certain degree of fineness.

66. Products made by the cracking or cutting process have a different appearance and different texture from those made by the grinding or crushing process. But considerable confusion now exists in regard to nomenclature of these products, with the result that purchasers of them or of bread containing them are likely to have difficulty in knowing what they are purchasing. Thus, the name "cracked wheat," while it is generally applied to products made by the cracking or cutting process, is also applied occasionally to coarsely ground food products of wheat. The name "cracked wheat" is also applied to animal feed which differs in several respects from products sold for human food, being made up mostly of broken or cracked wheat berries. The fineness of these food products is important in determining their suitability for the purposes stated in Finding 65, and the degree of fineness and of uniformity in the size of particles affords a reasonable method (in addition to the difference in method of manufacture and in shape and character of particles) of differentiating between them.

67. The coarse product made by the grinding process or crushing process is usually sold under the name "crushed wheat," and sometimes as "rolled wheat," or "curled wheat," and occasionally as "cracked wheat." The term "coarse ground wheat" has also been proposed. Reasonable limits on the sizes of the particles of this product, which is suitable for the purposes stated in Finding 65, are that at least 40% will pass through a No. 8 sieve, but less than 50% will pass through a No. 20 sieve.

68. The coarse product made by the cracking or cutting process is commonly known as "cracked wheat." Reasonable limits on the size of the particles of this product, which is suitable for the purposes stated in Finding 65, are that at least 90% will pass through a No. 8 sieve and not more than 20% will pass through a No. 20 sieve.

69. A suitable procedure for determining the percentage of these foods which will be retained on or pass through No. 8 and No. 20 sieves is as follows:

Use No. 8 and No. 20 sieves, having standard 8-inch full height frames, complying with the specifications for wire cloth and sieve frames in "Standard Specifications for Sieves" published March 1, 1940, in L. C. 584 of the U. S. Department of Commerce, National Bureau of Standards. Fit a No. 8 sieve into a No. 20 sieve. Attach bottom pan to the No. 20 sieve. Pour 100 grams of the sample into the No. 8 sieve. Attach cover and hold the assembly in a slightly inclined position with one hand. Shake the sieves by striking the sides against the other hand with an upward stroke, at the rate of about 150 times per minute. Turn the sieves about one sixth of a revolution, each time in the same direction, after each 25 strokes. Continue shaking for two minutes. Weigh the material which fails to pass through the No. 8 sieve and the material which passes through the No. 20 sieve.

70. A satisfactory and reliable method for the determination of moisture in whole wheat flour is that referred to in Finding 16. This method is well known and widely used in examining whole wheat flour for its moisture content.

71. A satisfactory and reliable method for the determination of moisture in cracked wheat and crushed wheat is that prescribed in the book "Official and Tentative Methods of Analysis of the Association of Official Agricultural Chemists," 4th edition, 1935, page 335, under the caption "Preparation of Sample—Official" and "Moisture I. Drying with Heat—Official." The same method has recently been republished in the book "Official and Tentative Methods of Analysis of the Association of Official Agricultural Chemists," 5th edition, 1940, page 353, under "Preparation of Sample—Official" and "Moisture I. Drying with Heat—Official." This method is well known and widely used in examining crushed wheat and cracked wheat for their moisture content.

72. The reasons for adding potassium bromate to flour, and the amounts in which it is added, stated in Findings 21 and 22, are equally applicable to whole wheat flour. Whole wheat flour to which potassium bromate is added is labeled "bromated"; an accurate designation for the product is "bromated whole wheat flour."

73. The food known as "whole durum wheat flour" is prepared from durum wheat by the same process employed in making whole wheat flour (findings 59, 62, 63, 64 and 65), and is used in making certain kinds of bread. Consumers generally expect whole durum wheat flour to contain the constituents of the whole durum wheat berry, other than moisture, in their natural proportions. A reasonable moisture limit and reasonable granulation limits for whole durum wheat flour are the same as for whole wheat flour.

74. The food commonly and usually known as "farina" is manufactured from wheat, either hard or soft, other than durum wheat and red durum wheat.

75. In making farina the wheat is first cleaned. It is usually tempered. It is then ground, bran coat and germ are separated from the endosperm, and the flour is removed by bolting. Farina consists essentially of endosperm, but the particles of farina are larger than those of flour. The size of the particles of farina has become well established through usage, and is a distinguishing characteristic of the product. The size is such that farina will pass through a No. 20 sieve but that only a small amount will pass through a No. 100 sieve. The material passing through the No. 100 sieve comes mostly from abrasion of particles of farina during handling after it is manufactured. A reasonable limit for this fine material is 3%.

76. A satisfactory method for testing farina for size of particles is as follows: Use No. 20 and No. 100 sieves, having standard 8-inch full height frames, complying with the specifications for wire cloth and sieve frames in "Standard Specifications for Sieves," published March 1, 1940, in L. C. 584 of the U. S. Department of Commerce, National Bureau of Standards. Fit a No. 20 sieve into a No. 100 sieve. Attach bottom pan to the No. 100 sieve. Pour 100 grams of the sample into the No. 20 sieve. Attach cover and hold the assembly in a slightly inclined position with one hand. Shake the sieves by striking the sides against the other hand with an upward stroke, at the rate of about 150 times per minute. Turn the sieves about one sixth of a revolution, each time in the same direction, after each 25 strokes. Continue shaking for two minutes. Weigh the material which fails to pass through the No. 20 sieve and the material which passes through the No. 100 sieve.

77. Consumers generally expect farina to be almost entirely free from bran coat and germ. In this respect it corresponds substantially to "patent flour." The extent of removal can be measured by the per cent of ash in the farina (see Finding 6). A generally recognized and reasonable maximum limit for ash is about 0.5%, or not more than 0.6% on a moisture free basis.

78. All farina contains some moisture. Excessive moisture impairs the keeping qualities of farina and unnecessarily increases its weight. A reasonable limit for moisture, which is not exceeded in good milling practice, is 15%.

79. A satisfactory and reliable method for the determination of the ash content of farina is that referred to in Finding 15. A satisfactory and reliable method for the determination of the moisture content of farina is that referred to in Finding 16. These methods are well known and widely used.

80. The removal of bran coat and germ from endosperm in the manufacture of farina removes those parts of the wheat which are richest in vitamins and minerals.

81. Farina is used as a breakfast food and as an ingredient of macaroni products. It is not as widely consumed as flour, but it is extensively used as a cereal food for children and in many cases is the only cereal food used during a period of their growth.

82. Certain manufacturers are now selling farina to which have been added vitamins and minerals. Ingredients now being added for this purpose are vitamin D contained in dried irradiated yeast (other scources of vitamin D would serve equally well), and portions of the vitamin B complex and minerals contained in freshly milled wheat germ or wheat germ from which part of the oil has been removed. Iron and calcium have also been added in the form of assimilable salts which are available and suitable for the purpose. In addition to wheat germ other sources of members of the vitamin B complex are available and suitable.

83. In general, the interest of consumers is affected by the enrichment of farina with vitamins and minerals in the same way as has been outlined in connection with the enrichment of flour in Findings 34 to 43, inclusive.

84. Because of the small quantities in which farina is ordinarily consumed and because of its special use in diets of some children, there is occasion for the enrichment of farina with quantities of vitamins and minerals substantially in excess of the reasonable maxima for flour. Findings 44 and 45 are applicable to farina, except that farina is not used for making bread and a reasonable limit for the wheat germ is 8%.

85. The time necessary for cooking enriched farina can be shortened by the addition of from ½ to 1% of disodium phosphate.

86. Farina enriched with vitamins and minerals has not acquired a common or usual name; an accurate designation for the product is "enriched farina."

87. The food commonly and usually known as semolina is manufactured from durum wheat.

88. In making semolina the wheat is first cleaned. It is usually tempered. It is then ground, the bran coat and germ are separated from the endosperm, and durum flour is removed by bolting. Semolina consists essentially of the endosperm, but the particles of semolina are larger than those of durum flour. The size of the particles of semolina has become well established through usage, and is a distinguishing characteristic of the product. The size is such that semolina will pass through a No. 20 sieve but that only a small amount will pass through a No. 100 sieve. The material passing through the No. 100 sieve comes mostly from abrasion of particles of semolina during handling after it is manufactured. A reasonable limit for this fine material is 3%.

89. A satisfactory method for testing semolina for size of particles is the method described in Finding 76.

90. Semolina is used in the manufacture of macaroni and noodles, and sometimes as a breakfast food. Consumers generally expect semolina to be almost entirely free from bran coat and germ. The extent of the removal can be measured by the per cent of ash in the semolina (see Finding 6).

A generally recognized and reasonable limit for ash is about 0.8% or not more than 0.82% on a moisture free basis.

91. All semolina contains some moisture. Excessive moisture impairs the keeping qualities of semolina and unnecessarily increases its weight. A reasonable limit for moisture, which is not exceeded in good manufacturing practice, is 15%.

92. A satisfactory and reliable method for the determination of the ash content of semolina is that referred to in Finding 15. A satisfactory and reliable method for determination of the moisture content of semolina is that referred to in Finding 16. These methods are well known and widely used.

DEFINITIONS AND STANDARDS

§ 15.000 **Flour, White Flour, Wheat Flour, Plain Flour—Identity; Label Statement of Optional Ingredients.** (a) Flour, white flour, wheat flour, plain flour, is the food prepared by grinding and bolting cleaned wheat other than durum wheat and red durum wheat; to compensate for any natural deficiency of enzymes, malted wheat, malted wheat flour, malted barley flour, or any combination of two or more of these, may be used; but the quantity of malted barley flour so used is not more than 0.25%. One of the cloths through which the flour is bolted has openings not larger than those of woven wire cloth designated "149 micron (No. 100)" in table I of "Standard Specifications for Sieves," published March 1, 1940, in L. C. 584 of the U. S. Department of Commerce, National Bureau of Standards. The flour is freed from bran coat, or bran coat and germ, to such extent that the per cent of ash therein, calculated to a moisture-free basis, is not more than the sum of one-twentieth of the per cent of protein therein, calculated to a moisture-free basis, and 0.35. Its moisture content is not more than 15%. Unless such addition conceals damage or inferiority of the flour or makes it appear better or of greater value than it is, one or any combination of two or more of the following optional bleaching ingredients may be added in a quantity not more than sufficient for bleaching, or in case such ingredient has an artificial aging effect, in a quantity not more than sufficient for bleaching and such artificial aging effect:

(1) oxides of nitrogen,
(2) chlorine,
(3) nitrosyl chloride,
(4) nitrogen trichloride,
(5) one part by weight of benzoyl peroxide mixed with not more than six parts by weight of a mixture of either potassium alum or calcium sulphate and magnesium carbonate.

(b) When any optional bleaching ingredient is used, the label shall bear the word "Bleached." Wherever the name of the food appears on the label so conspicuously as to be easily seen under customary conditions of purchase, the word "Bleached" shall immediately and conspicuously precede or follow such name without intervening written, printed, or graphic matter; except that where such name is a part of a trade-mark or brand, other written, printed, or graphic matter, which is also a part of such trade-mark or brand, may so intervene if the word "Bleached" is in such juxtaposition with such trade-mark or brand as to be conspicuously related to such name.

(c) For the purposes of this section—

(1) Ash is determined by the method prescribed in the book "Official and Tentative Methods of Analysis of the Association of Official Agricultural Chemists," 5th edition, 1940, page 212, under "Method I—Official." Ash is calculated to a moisture-free basis by subtracting the per cent of moisture in the flour from 100, dividing the remainder into the per cent of ash, and multiplying the quotient by 100.

(2) Protein is 5.7 times the nitrogen as determined by method prescribed in such book on page 26, under "Kjeldahl-Gunning-Arnold Method—Official." Protein is calculated to a moisture-free basis by subtracting the per cent of moisture in the flour from 100, dividing the remainder into the per cent of protein, and multiplying the quotient by 100.

(3) Moisture is determined by the method prescribed in such book on page 211, under "Vacuum Oven Method—Official."

§ 15.010 **Enriched Flour—Identity; Label Statement of Optional Ingredients.** Enriched flour conforms to the definition and standard of identity, and is subject to the requirements for label statement of optional ingredients, prescribed for flour by section 15.000, except that—

(a) it contains in each pound not less than 1.66 milligrams and not more than 2.5 milligrams of vitamin B_1, not less than 1.2 milligrams and not more than 1.8 milligrams of riboflavin, not less than 6 milligrams and not more than 24 milligrams of nicotinic acid or nicotinic acid amide, not less than 6 milligrams and not more than 24 milligrams of iron (Fe);

(b) vitamin D may be added in such quantity that each pound of the finished enriched flour contains not less than 250 U.S.P. units and not more than 1,000 U.S.P. units of vitamin D;

(c) calcium may be added in such quantity that each pound of the finished enriched flour contains not less than 500 milligrams and not more than 2,000 milligrams of calcium (Ca), except that enriched flour may be acidified with monocalcium phosphate irrespective of the minimum limit for calcium (Ca) herein prescribed;

(d) it may contain not more than 5% by weight of wheat germ or partly defatted wheat germ; and

(e) in determining whether the ash content complies with the requirements of this regulation allowance is made for ash resulting from any added iron or salts of iron or calcium.

Iron and calcium may be added only in forms which are harmless and assimilable. The substances referred to in paragraphs (a) and (b) may be added in a harmless carrier which does not impair the enriched flour; such carrier is used only in the quantity necessary to effect an intimate and uniform admixture of such substances with the flour.

§ 15.020 **Bromated Flour—Identity; Label Statement of Optional Ingredients.** Bromated flour conforms to the definition and standard of identity, and is subject to the requirements for label statement of optional ingredients, prescribed for flour by section 15.000, except that—

(a) potassium bromate is added in a quantity not exceeding 75 parts to each million parts of the finished bromated flour; and

(b) its protein content calculated to a moisture-free basis, is not less than 15% (determination and calculations of protein are made as prescribed in § 15.000 (c) (2)).

§ 15.030 **Enriched Bromated Flour—Identity; Label Statement of Optional Ingredients.** Enriched bromated flour conforms to the definition and standard of identity, and is subject to the requirements for label statement of optional ingredients, prescribed for enriched flour by section 15.010, except that—

(a) potassium bromate is added in a quantity not exceeding 75 parts to each million parts of the finished enriched bromated flour; and

(b) its protein content, calculated to a moisture-free basis, is not less than 15% (determination and calculations of protein are made as prescribed in §15.000 (c) (2)).

§ 15.040 **Durum Flour—Identity.** (a) Durum flour is the food prepared by grinding and bolting cleaned durum wheat. One of the cloths through which such flour is bolted has openings not larger than those of woven wire cloth designated "149 micron (No. 100)" in table I of "Standard Specifications for Sieves," published March 1, 1940, in L. C. 584 of the U. S. Department of Commerce, National Bureau of Standards. It is freed from bran coat, or bran coat and germ, to such extent that the per cent of ash therein, calculated to a moisture-free basis, is not more than 1.5%. Its moisture content is not more than 15%.

(b) For the purposes of this section, ash and moisture are determined by the methods therefor referred to in section 15.000 (c).

§ 15.050 **Self-Rising Flour, Self-Rising White Flour, Self-Rising Wheat Flour—Identity; Label Statement of Optional Ingredients.** (a) Self-rising flour, self-rising white flour, self-rising wheat flour, is an intimate mixture of flour, sodium bicarbonate, and the acid reacting substance monocalcium phosphate or sodium acid pyrophosphate or both. It is seasoned with salt. When it is tested by the method prescribed in subsection (c) not less than 0.5% of carbon dioxide is evolved. The acid reacting substance is added in sufficient quantity to neutralize the sodium bicarbonate. The combined weight of such acid reacting substance and sodium bicarbonate is not more than 4.5 parts to each 100 parts of flour used. Subject to the conditions and restrictions prescribed by section 15.000 (a), the bleaching ingredients specified in such section may be added as optional ingredients. If the flour used in making the self-rising flour is bleached, the optional bleaching ingredient used therein (see section 15.000 (a)) is also an optional ingredient of the self-rising flour.

(b) When any optional bleaching ingredient is used, the label shall bear the word "Bleached." Wherever the name of the food appears on the label so conspicuously as to be easily seen under customary conditions of purchase, the word "Bleached" shall immediately and conspicuously precede or follow such name, without intervening written, printed, or graphic matter; except that where such name is a part of a trade-mark or brand, other written, printed, or graphic matter, which is also part of such trade-mark or brand, may so intervene if the word "Bleached" is in such juxtaposition with such trade-mark or brand as to be conspicuously related to such name.

(c) The method referred to in subsection (a) is the method prescribed in "Official and Tentative Methods of Analysis of the Association of Official Agricultural Chemists," 5th edition, 1940, beginning on page 186 under "Gasometric Method with Chittick's Apparatus—Official," except that the following procedure is substituted for the procedure specified therein under "6—Determination":

Weigh 17 grams of the official sample into flask A, add 15-20 glass beads (4-6 mm. diameter) and connect this flask with the apparatus (fig. 22). Open stopcock C and by means of the leveling bulb E bring the displacement solution to the 25 cc. graduation above the zero mark. (This 25 cc. is a partial allowance for the volume of acid to be used in the decomposition.) Allow the apparatus to stand one to two minutes to insure that the temperature and pressure within the apparatus are the same as those of the room. Close the stopcock, lower the leveling bulb somewhat to reduce the pressure within the apparatus, and slowly run into the decomposition flask from burette F, 45 cc. of sulphuric acid (1+5). To prevent the liberated carbon dioxide from escaping through the acid burette into the air, keep the displacement solution in the leveling bulb at all times during the decomposition at a lower level than that in the gas-measuring tube. Rotate and then vigorously agitate the decomposition flask for three minutes to mix the contents intimately. Allow to stand for 10 minutes to bring to equilibrium. Equalize the pressure in the measuring tube by means of the leveling bulb and read the volume of gas from the zero point on the tube. Deduct 20 cc. from this reading (this 20 cc. together with previous allowance of 25 cc. compensates for the 45 cc. acid used in the decomposition). Observe the temperature of the air surrounding the apparatus and also the barometric pressure and multiply the number of cc. of gas evolved by the factor given in table 24—Chapter XLIII for the temperature and pressure observed. Divide the corrected reading by 100 to obtain the apparent per cent by weight of carbon dioxide in the official sample.

Correct the apparent per cent of carbon dioxide to compensate for varying atmospheric conditions by immediately assaying a synthetic sample by the same method in the same apparatus.

Prepare the synthetic sample with 16.2 grams of flour, 0.30 gram of monocalcium phosphate, 0.30 gram of salt, and a sufficient quantity of sodium bicarbonate U.S.P. (dried over sulphuric acid) to yield the amount of carbon dioxide recovered in assay of official sample. Determine this quantity by multiplying weight of carbon dioxide recovered in assay of official sample by 1.91.

Divide the weight of carbon dioxide recovered from synthetic sample by weight of carbon dioxide contained in sodium bicarbonate used.

Divide the quotient into the apparent per cent of carbon dioxide in official sample to obtain per cent of carbon dioxide evolved from the official sample.

§ 15.060 **Enriched Self-Rising Flour—Identity; Label Statement of Optional Ingredients.** Enriched self-rising flour conforms to the definition and standard of identity, and is subject to the requirements for label statement of optional ingredients, prescribed for self-rising flour by section 15.050, except that—

(a) it contains in each pound not less than 1.66 milligrams and not more than 2.5 milligrams of vitamin B_1, not less than 1.2 milligrams and not more than 1.8 milligrams of riboflavin, not less than 6 milligrams and not more than 24 milligrams of nicotinic acid or nicotinic acid amide, not less than 6 milligrams and not more than 24 milligrams of iron (Fe);

(b) vitamin D may be added in such quantity that each pound of the finished enriched self-rising flour contains not less than 250 U.S.P. units and not more than 1,000 U.S.P. units of vitamin D;

(c) calcium may be added in such quantity that each pound of the finished enriched self-rising flour contains not less than 500 milligrams and not more than 2,000 milligrams of calcium (Ca);

(d) it may contain not more than 5% by weight of wheat germ or partly defatted wheat germ;

(e) when calcium is added as dicalcium phosphate, such dicalcium phosphate is also considered to be an acid reacting substance; and

(f) when calcium is added as carbonate, the method set forth in section 15.040 (c) does not apply as a test for carbon dioxide evolved; but in such case the quantity of carbon dioxide evolved under ordinary conditions of use of the enriched self-rising flour is not less than 0.5% of the weight thereof.

Iron and calcium may be added only in forms which are harmless and assimilable. The substances referred to in paragraphs (a) and (b) may be added in a harmless carrier which does not impair the enriched self-rising flour; such carrier is used only in the quantity necessary to effect an intimate and uniform admixture of such substances with the flour.

§ 15.070 **Phosphated Flour, Phosphated White Flour, Phosphated Wheat Flour—Identity; Label Statement of Optional Ingredients.** Phosphated flour, phosphated white flour, phosphated wheat flour, conforms to the definition and standard of identity, and is subject to the requirements for label declaration of optional ingredients, prescribed for flour by section 15.000, except that—

(a) monocalcium phosphate is added in a quantity not less than 0.25% and not more than 0.75% of the weight of the finished phosphated flour; and

(b) in determining whether the ash content complies with the requirements of this regulation allowance is made for the added monocalcium phosphate.

§ 15.080 **Whole Wheat Flour, Graham Flour, Entire Wheat Flour—Identity; Label Statement of Optional Ingredients.** (a) Whole wheat flour, graham flour, entire wheat flour, is the food prepared by so grinding cleaned wheat other than durum wheat and red durum wheat that, when tested by the method prescribed in subsection (c) (2), not less than 90% passes through a No. 8 sieve and not less than 50% passes through a No. 20 sieve. The proportions of the natural constituents of such wheat, other than moisture, remain unaltered. To compensate for any natural deficiency of enzymes, malted wheat, malted wheat flour, malted barley flour, or any combination of two or more of these, may be used; but the quantity of malted wheat flour so used is not more than 0.5%, and the quantity of malted barley flour so used is not more than 0.25%. The moisture content of whole wheat flour is not more than 15%. Unless such addition conceals damage or inferiority of the whole wheat flour or makes it appear better or of greater value than it is, the optional bleaching ingredient nitrogen trichloride, chlorine, or a mixture of nitrosyl chloride and chlorine may be added in a quantity not more than sufficient for bleaching and artificial aging effects.

(b) When any optional bleaching ingredient is used, the label shall bear the word "Bleached." Wherever the name of the food appears on the label so conspicuously as to be easily seen under customary conditions of purchase, the word "Bleached" shall immediately and conspicuously precede or follow such name without intervening written, printed or graphic matter; except that where such name is a part of a trade-mark or brand, other written, printed, or graphic matter, which is also a part of such trade-mark or brand, may so intervene if the word "Bleached" is in such juxtaposition with such trade-mark or brand as to be conspicuously related to such name.

(c) For the purpose of this section—

(1) Moisture is determined by the method prescribed in "Official and Tentative Methods of Analysis of the Association of Official Agricultural Chemists," 5th edition, 1940, page 211, under "Vacuum Oven Method—Official."

(2) The method referred to in subsection (a) is as follows: Use No. 8 and No. 20 sieves, having standard 8-inch full height frames, complying with the specifications for wire cloth and sieve frames in "Standard Specifications for Sieves," published March 1, 1940, in L. C. 584 of the U. S. Department of Commerce, National Bureau of Standards. Fit a No. 8 sieve into a No. 20 sieve. Attach bottom pan to the No. 20 sieve. Pour 100 grams of the sample into the No. 8 sieve. Attach cover and hold the assembly in a slightly inclined position with one hand. Shake the sieves by striking the sides against the other hand with an upward stroke, at the rate of about 150 times per minute. Turn the sieves about one-sixth of a revolution, each time in the same direction, after each 25 strokes. Continue shaking for two minutes. Weigh the material which fails to pass through the No. 8 sieve and the material which passes through the No. 20 sieve.

§ 15.090 **Bromated Whole Wheat Flour—Identity; Label Statement of Optional Ingredients.** Bromated whole wheat flour conforms to the definition and standard of identity, and is subject to the requirements for label statement of optional ingredients, prescribed for whole wheat flour by section 15.080, except that potassium bromate is added in a quantity not exceeding 75 parts to each million parts of finished bromated whole wheat flour.

§ 15.100 **Whole Durum Wheat Flour—Identity; Label Statement of Optional Ingredients.** Whole durum wheat flour conforms to the definition and standard of identity, and is subject to the requirements for label statement of optional ingredients, prescribed for whole wheat flour by section 15.080, except that cleaned durum wheat, instead of cleaned wheat other than durum wheat and red durum wheat, is used in its preparation.

§ 15.110 **Crushed Wheat, Coarse Ground Wheat—Identity.** Crushed wheat, coarse ground wheat, is the food prepared by so crushing cleaned wheat other than durum wheat and red durum wheat that, when tested by the method prescribed in section 15.080 (c) (2), 40% or more passes through a No. 8 sieve and less than 50% passes through a No. 20 sieve. The proportions of the natural constituents of such wheat, other than moisture, remain unaltered. Crushed wheat contains not more than 15% of moisture as determined by the method prescribed in "Official and Tentative Methods of Analysis of the Association of Official Agricultural Chemists," 5th edition, 1940, page 353, under "Preparation of Sample—Official," and "Moisture I. Drying with Heat—Official."

§ 15.120 **Cracked Wheat—Identity.** Cracked wheat is the food prepared by so cracking or cutting into angular fragments cleaned wheat other than durum wheat and red durum wheat that, when tested by the method prescribed in section 15.080 (c) (2) not less than 90% passes through a No. 8 sieve and not more than 20% passes through a No. 20 sieve. The proportions of the natural constituents of such wheat, other than moisture, remain unaltered. Cracked wheat contains not more than 15% of moisture as determined by the method prescribed in "Official and Tentative Methods of Analysis of the Association of Official Agricultural Chemists," 5th edition, 1940, page 353, under "Preparation of Sample—Official," and "Moisture I. Drying with Heat—Official."

§ 15.130 **Farina—Identity.** (a) Farina is the food prepared by grinding and bolting cleaned wheat, other than durum wheat and red durum wheat, to such fineness that, when tested by the method prescribed in subsection (b) (2), it passes through a No. 20 sieve, but not more than 3% passes through a No. 100 sieve. It is freed from bran coat, or bran coat and germ, to such extent that the per cent of ash therein, calculated to a moisture-free basis, is not more than 0.6%. Its moisture content is not more than 15%.

(b) For the purposes of this section—

(1) Ash and moisture are determined by the methods therefor referred to in section 15.000 (c).

(2) The method referred to in subsection (a) is as follows: Use No. 20 and No. 100 sieves, having standard 8-inch full height frames, complying with the specifications for wire cloth and sieve frames in "Standard Specifications for Sieves," published March 1, 1940, in L. C. 584 of the U. S. Department of Commerce, National Bureau of Standards. Fit a No. 20 sieve into a No. 100 sieve. Attach bottom pan to the No. 100 sieve. Pour 100 grams of the sample into the No. 20 sieve. Attach cover and hold the assembly in a slightly inclined position with one hand. Shake the sieves by striking the sides against the other hand with an upward stroke, at the rate of about 150 times per minute. Turn the sieves about one-sixth of a revolution, each time in the same direction, after each 25 strokes. Continue shaking for two minutes. Weigh the material which fails to pass through the No. 20 sieve and the material which passes through the No. 100 sieve.

§ 15.140 **Enriched Farina—Identity; Label Statement of Optional Ingredients.** (a) Enriched farina conforms to the definition and standard of identity prescribed for farina by section 15.130, except that—

(1) it contains in each pound not less than 1.66 milligrams of vitamin B_1, not less than 1.2 milligrams of riboflavin, not less than 6 milligrams of nicotinic acid or nicotinic acid amide, and not less than 6 milligrams of iron (Fe);

(2) vitamin D may be added in such quantity that each pound of the finished enriched farina contains not less than 250 U.S.P. units of the optional ingredient vitamin D;

(3) calcium may be added in such quantity that each pound of the finished enriched farina contains not less than 500 milligrams of the optional ingredient calcium (Ca);

(4) it may contain not more than 8% by weight of the optional ingredient wheat germ or partly defatted wheat germ;

(5) it may contain not less than 0.5% and not more than 1% by weight of the optional ingredient disodium phosphate; and

(6) in determining whether the ash content complies with the requirements of this regulation allowance is made for ash resulting from any added iron or salts of iron or calcium, or from any added disodium

phosphate, or from any added wheat germ or partly defatted wheat germ.

Iron and calcium may be added only in forms which are harmless and assimilable. Dried irradiated yeast may be used as a source of vitamin D. The substances referred to in subparagraphs (1) and (2) may be added in a harmless carrier which does not impair the enriched farina; such carrier is used only in the quantity necessary to effect an intimate and uniform admixture of such substances with the farina.

(b) When the optional ingredient disodium phosphate is used, the label shall bear the statement "Disodium Phosphate Added for Quick-cooking." Wherever the name of the food appears on the label so conspicuously as to be easily seen under customary conditions of purchase, such statement shall immediately and conspicuously precede or follow such name, without intervening written, printed, or graphic matter; except that where such name is a part of a trade-mark or brand, other written, printed, or graphic matter, which is also a part of such trade-mark or brand, may so intervene, if such statement is in such juxtaposition with such trade-mark or brand as to be conspicuously related to such name.

§ 15.150 **Semolina—Identity.** (a) Semolina is the food prepared by grinding and bolting cleaned durum wheat to such fineness that, when tested by the method prescribed in section 15.130 (b) (2), it passes through a No. 20 sieve, but not more than 3% passes through a No. 100 sieve. It is freed from bran coat, or bran coat and germ, to such extent that the per cent of ash therein, calculated to a moisture-free basis, is not more than 0.92%. Its moisture content is not more than 15%.

(b) For the purposes of this section—Ash and moisture are determined by the methods therefor referred to in section 15.000 (c).

This order shall become effective on January 1, 1942. Washington, D. C., May 26, 1941.

NEW YORK FLOUR TRADE RULES

Sales of flour to and in New York are to a very large extent governed by the rules of the New York Produce Exchange. These rules are made by what is known as the committee on flour, five members of the flour trade, appointed by the president of the exchange, subject to approval by the board of managers.

This committee has entire charge of matters pertaining to the flour trade and the inspection of flour, the appointment of the chief inspector and his assistants, and acts as a board of appeals in cases of dissatisfaction with inspection.

When sitting as an appeals board the committee on flour collects a fee of $15 or more from the loser in the case appealed. The committee on flour also fixes rules governing the flour trade, but in such action, a majority vote of the flour trade is essential to the adoption of the rule.

New York flour inspections are made at the railway terminals and the inspection certificates are dispatched direct to the receivers. Some receivers give the inspection department carte blanche to inspect all shipments arriving for them; others order inspection only upon arrival of cars they desire to have inspected.

In cases where flour remains on track or in store for a considerable period, several inspections are sometimes made.

Percy Van Alstyne is chief flour inspector at New York.

FLOUR INSPECTION

Inspection charges are 1½c bbl of flour and 1c per sack of flour or barrel of meal. For original inspection, the buyer may charge ½c per package to the account of seller. The charge for reinspection is 1c per package, to be divided between buyer and seller, when ordered by the former. Charges for weighing 25 bbls and taring 5 bbls are $3, and for weighing without taring 6c on each barrel or bag weighed, to be equally divided between buyer and seller. All weighing and inspection charges are retained in a special "flour inspection fund."

On all sales made of flour on spot or to arrive at the Port of New York, the buyer is allowed 48 hours for inspection and acceptance or rejection of the tender; the time allowance to date from the hour the flour is available for inspection, and not to include Sundays, legal holidays, or other days when the Produce Exchange is closed for business. Members of the New York Produce Exchange or other authorized, responsible parties may have flour inspected.

REINSPECTION OF FLOUR

A holder of an inspection certificate, if dissatisfied, may order reinspection; if the original inspection is sustained, the holder of the certificate shall pay the fee; if the original inspection is not sustained the exchange is liable for the actual loss occasioned through the erroneous inspection.

APPEALS

A holder of an inspection certificate may further appeal to the committee on flour, upon the payment of a fee of $5, in case the inspection is sustained, for each parcel submitted. Any party feeling aggrieved at the decision of the committee on flour in a matter of interpretation of the flour trade rules, but not specifically in inspections, may appeal to the board of managers of the Produce Exchange.

SCOPE OF FLOUR INSPECTION

Flour is inspected for soundness and uniformity only, and according to rule is marked "sound" or "unsound" as the case may be.

FLOUR WEIGHTS

In determining weights, the average of 25 bbls is taken, leaving out packages in bad order or largely deficient in weight, which must be separately entered and certified to. The net weight is accepted as the actual weight.

TIME OF SHIPMENT

"Prompt shipment" means shipment from mill within 14 days, not including the day of sale; "immediate shipment" means within seven days, not including day of sale. When flour is sold "to arrive" without time of delivery being stated, seller has the right, at the end of 60 days, to tender the flour or such part thereof as has not been taken by the buyer. When flour is sold for "mill shipment" without specified date, seller has the right to demand shipping directions within 60 days.

UNFILLED CONTRACTS

When buyer refuses to care for flour when properly tendered, seller has the right to cancel the transaction or to sell the flour for account of buyer, the buyer to stand for any loss made. When seller does not deliver, the buyer has the right to cancel the contract or to replace the flour in the open market, charging his loss in replacement to the seller. In case of any breach of contract a nonmember may enter complaint against a member under the present rules.

UNSOUND FLOUR

Flour and corn goods are inspected for soundness and uniformity. When so inspected the flour inspection department of the exchange shall issue a certificate, in such form as may be approved by the committee on flour, to the owner of the lot, certifying the result of the inspection. Upon request of the owner of the lot and upon payment of such charges as shall be determined by the committee on flour, the flour inspection department shall brand each sack and/or barrel with the word "sound" or "unsound," as the case may be, together with the date of the inspection and the name of the New York Produce Exchange Inspection.

Sound flour or corn goods found, on inspection, to contain worms or weevil, are not branded. All found on reinspection to contain worms or weevil have the original inspection brand marked off by the inspector.

On request, the inspection brand may be omitted on flour or corn goods when same is found to be sound, but in every case unsound goods must be so branded.

When flour or corn goods are found to be irregular, the inspector brands marks on the package to distinguish the various qualities, and a record of these irregularities is kept and appears on the certificate of inspection.

ODORS IN FLOUR

Flour having an injurious odor, other than that of garlic, may not be tested as sound in the New York market.

New York Free Lighterage

HUDSON RIVER

New York side: Battery to 135th Street.

New Jersey side: National Storage Docks, Communipaw, to and including George Washington Bridge.

EAST RIVER AND HARLEM RIVER

New York side: Battery to Jerome Avenue Bridge, including Harlem River side of Ward's Island and Randall's Island.

Brooklyn side: From Pot Cove, Astoria, L. I., to and including 69th Street, South Brooklyn (Bay Ridge), including Newton Creek, Dutch Kills Creek and Whale Creek points in the Wallabout Canal and to Hamilton Avenue Bridge, Gowanus Canal.

NEW YORK BAY

New York Bay: Points on north and east shore of Staten Island, between Bridge Creek (Arlington) and Clifton (Hylan Boulevard), both inclusive, and including Shooters Island.

Points on the New Jersey shore on New York Bay, and on Kill von Kull between Constable Hook and Avenue C, Bayonne City, opposite Port Richmond, S. I.

KILL VON KULL, NEWARK BAY, PASSAIC AND HACKENSACK RIVERS

Kill von Kull, Newark Bay, Passaic and Hackensack Rivers: To and from points on the New Jersey shore between Avenue C, Bayonne, to and including Neck of Bergen Point (except Safety Ins. Wire and Cable Co. dock.)

To and from points on the east shore of Newark Bay, beyond Neck of Bergen Point to and including C. R. R. of N. J. main line (Newark Bay) bridge.

To and from points beyond C. R. R. of N. J. main line (Newark Bay) bridge to Newark and Kearny, N. J., inclusive, and points on the Hackensack River to and including Newark-Jersey City turnpike bridge.

STATEN ISLAND SOUND

Staten Island Sound: To and from points on New Jersey shore from the C. R. R. of N. J. main line (Newark Bay) bridge to and including Perth Amboy, N. J., on Staten Island Sound.

New York Rules and Charges

Flour in carloads for domestic delivery not moved within two days is stored at risk and expense of owner at public warehouses within the lighterage limits. Charges are 1c per 100 lbs for the first six periods of five days each, 1¾c per 100 lbs for the second six periods of five days each, and 2¼c per 100 lbs for each succeeding period of five days.

The free time for export flour is 10 days. For the first 10 days thereafter the charge is 1c per 100 lbs and for each succeeding 10-day period or fraction thereof, the charge is ½c.

For Transferring Grain in Elevator—One eighth of one cent bu.

For Delivery in Bags—For bagging, including sewing or tying, with or without a specific weight in each bag, 1¾c bu.

Final Delivery—When freight is ordered by shipper into New York warehouse, carriers construe it as accomplishing final delivery, and no subsequent lighterage will be permitted.

Delivering Grain to Ocean Vessel—For delivery direct from floating elevator the charge is ½c bu. On export grain delivered direct to ocean vessels from railroad elevators the charge is ½c bu.

For Mixing Grain—When grain is mixed in elevator, the charge is ¼c bu, applying on each bushel forming the mixture.

Receiving, Weighing, and Storing—The uniform charge is ¼c bu for the first 10 days or part thereof, and 1-25c bu for each day thereafter. Ten days' free storage is allowed on grain exported, if ordered on storage before arrival, provided grain is sent direct from railroad elevator to vessel or delivered direct to vessel from elevator.

Track and Storage Charges at Railroad Piers—For the first 48 hours after car is placed on track for delivery (time computed from first 7 a.m. after car is placed), no charge is made. At railroad piers the charges for the next five days are 1½c per 100 lbs, and every day after that 3½c per 100 lbs.

Demurrage Charges—For flour arriving at any railroad station, track delivery, there is a charge of $2.20 per day for the first four; $5.50 a day for each day after the first four.

Terminal Charges—On import, export, intercoastal and coastwise traffic entitled to free lighterage, rates to or from New York, including free lighterage, will include loading or unloading of lighters, barges or cars on car floats in lieu of lighterage at place of receipt or delivery. In the absence of advice by the consignor or consignee of his purpose to load or unload the traffic, such service will be performed by the carrier at a charge of 2¾c per 100 lbs. These charges do not apply to grain nor flour when delivery is made to a railroad pier station.

Flour in carloads for domestic delivery consigned to a specific point of lighterage delivery in New York harbor, and also consigned "For Official Inspection of New York Produce Exchange Flour Inspection Department" or when not so consigned for official inspection and the railroad receives notice from consignee or owner not less than 24 hours before date of arrival of flour at the storage point, will be unloaded into warehouse or piers and there held free of storage charges for a period not exceeding two days, subject to order of consignee; and while so held either on the docks or in the warehouse by the railroad, the responsibility of the carrier shall be that of a warehouse only. After the expiration of the free time specified, such freight will be subject to storage charges.

New York Handling Complaints

The New York Produce Exchange rules permit nonmembers of the organization to make complaint against members. Many commercial exchanges permit complaints only from another member of the exchange, and this was formerly the case in New York. The same condition is true regarding complaints against members of the Bourse, Philadelphia.

Foreign Correspondence Terms

A/B or Aktiebolag or Aktiebolaget—Swedish for limited liability company.

A-G or Actiengesellschaft—German for unrestricted and unlimited liability company.

A/S or Aktieselskab or Aktieselskabet—Danish for limited liability company.

A/S or Aktieselskab—Norwegian for limited liability company.

Cia—Italian for company.

Cie—French for company.

Aan de, Firma—Dutch equivalent for to the firm.

De Heeren—Dutch equivalent for Messrs.

Di fu (as part of a name)—Italian equivalent for "son of the late or deceased . . ."

Ditta—Italian equivalent for commercial house.

Efft. or Efterfolgere—Danish for successors.

Ezn, Azn, etc.—Dutch suffix to surnames, first letter indicating paternal first name, "zn" meaning zoon or son.

Fils—French for son or sons.

Figli—Italian for sons.

Figlio—Italian for son.

Firma (Associazione di Mercanti)—Italian for firm; also German.

Fratelli or Frlli—Italian for brothers.

Frères—French for brothers.

Gebroeders or Gebrs.—Dutch for brothers.

Gebrüder—German for brothers.

Gesellschaft—German for company.

G.m.b.h. or Gesellschaft mit beschrankter Haftung—German for limited liability company.

Hermanos or Hnos.—Spanish for brothers.

Hijo—Spanish for son (plural, hijos).

Kauppa—Finnish for company.

Ltd. or Limited—English term for limited liability company.

Maatschappij—Dutch for company.

Nachf. or Nachfolge—German for successors.

N. V. Handelmaatschappij or Naamlooze Vennootschap Handelmaatschappij—Dutch for limited liability company.

O/Y or Osakeyhtio—Finnish for limited liability company.

Sohn—German for son (plural, soehne).

Señor, Don—Spanish for Mr.

Señores—Spanish for Messrs.

Signor or Sig.—Italian for Mr.

Signores or Sigg.—Italian for Messrs.

Societa Anonima—Italian for limited liability company.

Société Anonyme—French for limited liability company.

Viuda de—Spanish for "widow of."

V/h or voorheen—Dutch for formerly.

y or &—Spanish for and.

Zoon—Dutch for son.

MMM-MMM—MUST TELL
THE WIFE HOW MUCH
I LIKE THIS BREAD!
THERE'S YOUR BEST
SALES TALK
It's the old mouse-trap idea—a better loaf of bread—with delicious flavor, fine texture, uniform results, freshness that lasts—and the good word gets around. Thousands of bakers and housewives who hew to the fine-quality standard swear by Russell-Miller and Stanard-Tilton flours . . . because they can count on uniform quality, consistently easy handling under varied conditions, high gluten content, strength, and excellent flavor.
RUSSELL-MILLER MILLING CO.
Headquarters: Minneapolis, Minn.
STANARD-TILTON DIVISION
Alton, Illinois • Dallas, Texas
MILLERS OF
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AND
AMERICAN BEAUTY
FLOURS

FLOUR MILLING CAPACITY AND THE PRODUCTION OF FLOUR

A Section Devoted to Statistics With Regard to Flour Milling Capacity of the More Important Centers with a Record of the Amount of Flour Ground in These Districts—Principal Milling Centers

UNITED STATES WHEAT GROUND, FLOUR AND MILLFEED PRODUCTION BY MONTHS

Wheat ground, flour produced and millfeed produced by months for crop years ended June 30, as compiled by the Department of Commerce from reports by mills that normally manufacture 5,000 bbls or more of flour annually (000's omitted):

WHEAT

Expressed in thousands of bushels

	Total	July	August	Sept'ber	October	Nov'ber	December	January	February	March	April	May	June
1940-41	478,895	38,921	40,474	42,268	45,319	39,707	37,078	40,000	36,575	39,792	40,899	39,045	38,819
1939-40	476,263	38,833	43,746	51,101	43,025	37,770	36,848	39,323	36,400	37,812	37,632	38,694	35,079
1938-39	479,161	39,290	42,098	44,235	43,896	40,324	38,357	38,755	35,447	41,068	37,698	39,066	38,927
1937-38	465,524	38,872	39,993	42,467	43,477	40,209	33,538	37,421	34,924	39,589	36,085	35,784	39,165
1936-37	461,977	43,660	42,087	40,055	41,770	36,844	37,832	37,586	34,630	38,605	38,468	34,892	35,548
1935-36	455,507	33,918	37,141	41,686	45,664	38,254	33,123	40,042	38,987	38,273	36,453	35,328	36,638
1934-35	440,665	33,701	39,682	40,371	41,833	37,393	34,322	37,766	34,509	36,309	35,466	35,567	33,745
1933-34	431,560	38,288	30,866	34,473	37,371	37,067	33,492	39,903	36,028	38,320	34,187	37,089	34,476
1932-33	474,409	36,023	41,417	43,015	42,830	39,841	38,006	36,949	33,133	40,705	42,560	40,393	39,437
1931-32	488,991	45,362	44,413	44,569	47,463	45,230	37,157	37,290	35,130	38,669	37,559	35,344	35,805
1930-31	506,976	43,721	47,654	49,382	49,913	42,428	41,307	42,529	37,939	40,137	39,127	36,946	35,893
1929-30	527,343	42,895	50,725	47,583	50,445	43,912	41,062	43,812	40,506	43,083	41,854	41,329	40,137
1928-29	527,757	39,552	47,657	48,014	52,890	45,289	42,246	45,767	41,292	42,004	39,475	42,738	40,833
1927-28	513,854	38,547	44,099	48,181	49,792	44,882	42,604	42,823	41,645	45,280	39,519	40,449	36,083
1926-27	507,125	43,942	47,654	49,299	48,727	43,855	40,624	39,354	36,569	40,908	38,184	38,924	39,085
1925-26	483,373	40,651	42,818	45,952	49,799	42,416	41,656	40,358	34,573	38,021	35,234	34,647	37,248

FLOUR

Expressed in thousands of barrels

1940-41	105,330	8,504	8,881	9,288	9,960	8,737	8,166	8,818	8,063	8,764	9,002	8,596	8,552
1939-40	104,449	8,432	9,522	11,191	9,428	8,298	8,119	8,649	8,025	8,320	8,269	8,514	7,682
1938-39	104,638	8,507	9,160	9,699	9,634	8,838	8,416	8,476	7,757	8,951	8,244	8,516	8,440
1937-38	100,974	8,415	8,678	9,234	9,446	8,698	8,168	8,116	7,572	8,600	7,834	7,739	8,474
1936-37	100,264	9,416	9,148	8,708	9,120	8,019	8,216	8,180	7,536	8,402	8,340	7,542	7,637
1935-36	98,421	7,387	8,082	9,055	9,897	8,274	7,175	8,644	8,401	8,252	7,940	7,569	7,845
1934-35	96,613	7,325	8,654	8,822	9,181	8,211	7,547	8,315	7,599	7,986	7,786	7,806	7,381
1933-34	94,176	8,275	6,719	7,540	8,181	8,116	7,332	8,719	7,867	8,362	7,455	8,103	7,507
1932-33	103,463	7,828	9,005	9,394	9,382	8,719	8,323	8,077	7,216	8,867	9,298	8,777	8,577
1931-32	105,794	9,852	9,658	9,735	10,399	9,891	8,148	8,180	7,692	8,483	8,197	7,739	7,820
1930-31	109,896	9,466	10,312	10,674	10,817	9,184	8,973	9,232	8,242	8,724	8,494	8,015	7,762
1929-30	114,558	9,337	11,058	10,373	10,968	9,538	8,905	9,510	8,783	9,347	9,071	8,981	8,687
1928-29	115,293	8,516	10,370	10,512	11,586	9,909	9,269	10,014	9,026	9,207	8,636	9,334	8,912
1927-28	111,227	8,388	9,617	10,470	10,817	9,735	9,235	9,242	8,975	9,772	8,506	8,712	7,758
1926-27	110,951	9,570	10,447	10,840	10,678	9,604	8,909	8,624	8,023	8,952	8,308	8,497	8,499
1925-26	104,283	8,840	9,293	9,938	10,728	9,128	8,948	8,679	7,429	8,289	7,589	7,418	8,004

MILLFEED

Expressed in thousands of pounds

1940-41	8,294,194	681,823	705,137	735,441	785,828	687,760	639,306	690,728	630,124	686,551	706,944	675,411	669,141
1939-40	8,310,962	689,557	772,787	890,697	752,851	655,454	635,415	682,637	630,066	657,156	656,277	673,073	614,992
1938-39	8,455,725	702,336	743,993	770,077	765,608	704,995	672,016	681,624	625,888	730,612	665,468	693,372	699,737
1937-38	8,380,366	701,642	717,658	761,784	781,689	722,674	673,105	675,738	631,061	710,240	650,595	646,817	707,364
1936-37	8,389,677	793,510	758,322	723,978	749,121	666,240	687,727	681,276	628,005	697,451	704,618	642,595	656,834
1935-36	8,237,836	599,548	659,717	744,779	821,200	692,087	595,761	728,216	709,574	694,897	665,223	650,921	675,913
1934-35	7,752,890	600,486	704,298	716,936	736,619	655,023	601,417	657,904	599,975	634,700	621,828	625,958	597,746
1933-34	7,636,408	680,822	548,544	609,599	656,225	653,267	589,978	706,100	639,724	674,587	607,078	657,205	613,279
1932-33	8,312,708	631,452	731,368	752,259	762,369	691,984	660,411	646,950	572,587	709,357	745,950	711,463	696,653
1931-32	8,464,637	802,424	785,106	781,318	828,114	789,737	645,812	645,881	610,366	671,853	659,666	616,606	627,664
1930-31	9,082,292	774,252	851,404	888,576	899,580	762,108	739,243	761,935	678,795	713,507	702,189	663,303	647,400
1929-30	9,294,290	746,628	882,931	831,523	886,004	776,745	728,157	772,726	717,926	763,376	742,542	732,153	713,579
1928-29	9,128,555	697,371	819,994	820,934	910,900	780,189	727,305	792,580	716,899	725,848	683,046	742,133	711,356
1927-28	9,006,608	668,232	761,468	838,108	856,428	782,841	745,242	753,889	736,387	799,669	698,267	716,029	645,048
1926-27	8,721,556	768,231	820,795	844,474	834,908	748,885	695,130	676,292	624,025	701,790	659,199	672,824	675,003
1925-26	8,696,825	708,349	754,446	833,270	907,390	769,373	756,198	728,335	625,503	685,314	633,032	626,139	669,426

WHEAT FLOUR PRODUCTION AT PRINCIPAL CENTERS IN THE UNITED STATES

Wheat flour production at principal centers in the United States as reported to The Northwestern Miller, by calendar years, in barrels:

	Buffalo	Kansas City	Minneapolis	Toledo	St. Louis	Wichita	Salina	Seattle	Tacoma	Portland	Chicago
1941	10,180,172	6,841,857	5,622,308	2,254,291	711,775	1,985,962	2,285,316	1,286,986	1,960,882	1,716,665	1,299,931
1940	9,803,332	6,212,670	5,241,558	2,036,330	766,045	1,775,505	2,301,619	1,330,660	1,922,195	1,890,111	1,255,950
1939	10,188,324	7,246,117	5,559,444	2,066,030	886,350	2,046,025	2,535,483	1,452,860	2,008,123	2,142,365	1,339,446
1938	10,290,421	7,479,540	5,736,662	2,071,275	776,000	1,926,516	2,349,368	1,207,121	1,952,330	2,004,218	1,608,409
1937	10,251,807	7,332,452	5,681,400	2,034,200	963,016	2,396,146	2,256,514	1,172,399	2,045,879	1,860,133	1,234,437
1936	10,425,335	6,202,743	6,452,667	2,094,330	949,984	2,162,953	2,113,851	1,259,881	1,715,663	1,848,049	1,359,671
1935	9,635,100	6,070,448	6,636,159	1,754,340	844,713	1,893,090	1,854,669	1,080,891	2,122,862	1,646,943	1,362,062
1934	9,625,036	5,856,681	7,081,830	1,947,870	1,023,600	1,799,057	1,767,016	1,219,560	1,848,246	1,142,783	1,298,135
1933	9,781,281	6,090,819	7,283,244	2,010,205	1,103,200	2,074,562	1,647,363	1,033,627	1,440,461	1,125,820	1,360,631
1932	9,789,068	7,082,280	7,227,187	2,229,580	1,071,796	2,483,559	1,902,125	1,192,738	1,289,975	1,281,532	1,632,288
1931	11,076,301	7,536,541	9,121,571	2,198,910	1,428,250	1,656,573	2,189,307	1,305,845	1,884,317	1,209,577	1,552,922
1930	12,269,920	7,775,135	10,797,194	2,326,475	2,051,800	1,867,755	1,909,836	1,281,963	1,974,302	1,152,136	1,635,094
1929	10,132,969	7,928,034	10,796,630	2,310,411	1,968,173	1,874,737	1,993,095	1,473,842	2,249,044	1,315,000	1,527,600
1928	10,060,029	7,565,288	12,243,754	1,949,933	1,642,900	1,820,537	1,936,823	1,530,092	2,021,395	1,181,149	1,765,077
1927	10,031,814	7,381,501	11,540,951	2,110,050	1,404,000	1,992,650	1,632,409	1,317,836	1,723,145	1,278,185	1,851,000
1926	9,671,829	6,179,234	11,793,258	2,001,350	1,440,568	2,052,888	1,458,774	1,169,842	1,483,442	1,271,153	1,867,000
1925	9,462,571	5,410,714	12,059,557	1,750,050	1,245,946	1,624,423	1,318,400	1,204,819	1,158,648	1,315,611	1,781,000
1924	6,988,609	5,218,021	11,679,130	1,818,650	1,275,624	2,058,624	1,127,663	1,460,486	1,289,575	2,022,691	1,858,000
1923	6,462,571	4,886,775	13,488,460	1,620,050	1,758,077	1,864,521	974,935	1,685,568	1,553,136	2,115,340	1,342,000
1922	6,702,827	4,707,964	15,642,395	1,350,000	1,518,042	1,917,028	1,734,128	1,471,453	1,455,552	1,976,075	1,476,500
1921	6,693,255	3,965,769	14,871,750	1,162,075	1,505,765	.....	1,672,477	1,067,888	1,481,119	1,624,015	820,000
1920	5,243,360	3,597,246	15,003,195	929,930	1,441,183	.....	.....	1,352,320	1,392,149	1,400,497	'955,000
1919	6,688,290	3,628,151	17,500,890	1,558,560	1,798,298	.....	.....	1,549,245	1,686,442	1,319,865	1,272,000
1918	5,947,710	2,469,777	14,413,830	1,117,913	1,398,283	.....	.....	1,290,388	1,433,243	2,217,000	1,148,250
1917	5,640,380	3,365,200	17,610,845	1,478,500	1,619,256	.....	.....	1,111,902	1,425,190	915,300	1,168,118
1916	5,886,120	3,146,332	18,541,650	1,562,700	1,750,686	.....	.....	1,088,860	1,428,624	906,649	1,235,000
1915	6,690,350	2,865,460	18,089,195	1,456,750	1,678,463	.....	.....	890,633	1,163,980	.....	1,155,000
1914	5,718,550	2,376,840	17,769,280	1,483,500	1,579,079	.....	.....	1,018,795	1,362,822	.....	1,083,000
1913	5,107,850	2,294,617	17,673,725	1,307,200	1,036,761	.....	.....	.....	.....	.....	1,028,000
1912	4,869,285	2,080,268	17,031,935	1,381,600	1,030,704	.....	.....	.....	.....	.....	1,108,000
1911	4,731,000	1,822,257	15,795,470	1,335,950	1,055,416	.....	.....	.....	.....	.....	1,027,500
1910	3,764,850	2,226,266	15,375,760	1,060,300	969,545	.....	.....	.....	.....	.....	1,090,000
1909	3,172,500	2,427,376	14,867,245	1,057,750	926,029	.....	.....	.....	.....	.....	1,058,000
1908	2,664,500	2,577,577	13,694,895	1,069,100	965,832	.....	.....	.....	.....	.....	850,000
1907	2,607,500	1,974,949	13,660,465	1,204,400	1,189,949	.....	.....	.....	.....	.....	1,000,000
1906	2,347,500	1,989,000	13,825,795	.....	1,010,120	.....	.....	.....	.....	.....	960,000
1905	2,465,000	2,053,000	14,366,095	.....	1,285,537	.....	.....	.....	.....	.....	975,000
1904	2,206,000	1,595,100	13,652,735	.....	1,102,980	.....	.....	.....	.....	.....	750,000
1903	990,000	1,535,000	15,582,785	.....	1,112,316	.....	.....	.....	.....	.....	838,850
1902	966,000	1,298,000	16,260,105	.....	1,322,530	.....	.....	.....	.....	.....	1,262,225
1901	.....	1,431,000	15,921,880	.....	1,505,234	.....	.....	.....	.....	.....	1,280,000

U. S. Calendar Year Flour Production

Flour production by mills reporting to the Department of Commerce, which normally produce 5,000 bbls or more of flour annually, by calendar years (000's omitted):

	Wheat ground, bus	Flour output, bbls	Millfeed output, lbs
1941	482,339	105,992	8,331,518
1940	468,706	102,994	8,149,497
1939	482,283	105,374	8,493,461
1938	471,169	102,589	8,380,838
1937	462,284	100,275	8,369,332
1936	467,968	101,179	8,503,642
1935	443,137	96,741	7,850,993
1934	447,307	97,752	7,912,753
1933	460,980	96,974	7,821,300
1932	460,980	100,761	8,061,968
1931	496,763	108,153	8,799,640
1930	525,126	113,806	9,357,465
1929	528,731	115,308	9,223,850

Buffalo Flour Production

Wheat flour production of Buffalo mills which reported to The Northwestern Miller, by months and calendar years, in barrels:

	1941	1940	1939	1938
Jan.	878,169	796,650	816,150	759,127
Feb.	809,625	720,765	786,794	748,608
Mch.	873,962	819,150	858,489	858,897
April	883,533	711,845	826,963	794,539
May	817,908	818,352	877,697	767,364
June	736,015	812,485	819,437	834,563
July	816,155	831,024	824,297	851,922
Aug.	859,429	870,126	883,127	953,502
Sept.	867,675	873,831	1,062,491	964,814
Oct.	891,998	932,275	1,006,681	1,028,030
Nov.	817,839	793,494	713,307	819,754
Dec.	927,963	823,335	685,891	819,301
Tot.	10,180,172	9,803,332	10,188,324	10,200,421

Minneapolis Calendar Year Flour Production

Minneapolis flour production by mills which reported to The Northwestern Miller, by months and calendar years, in barrels:

	1941	1940	1939	1938
January	435,036	455,407	477,585	467,078
February	425,305	408,796	417,265	428,665
March	412,483	402,973	485,176	433,622
April	402,960	377,333	453,910	416,420
May	410,067	410,608	426,325	438,563
June	427,316	372,759	416,075	458,961
July	417,365	414,199	399,951	425,723
August	457,742	490,959	467,115	500,212
Sept'ber	573,553	581,443	670,864	602,212
October	611,491	501,996	547,192	581,078
Nov'ber	484,210	444,401	412,122	523,220
Dec'ber	564,780	380,684	385,864	460,908
Tots.	5,622,308	5,241,558	5,559,444	5,736,662

United States Milling in Bond Activity

Wheat withdrawn for milling in bond, exports of flour milled in bond, and millfeed produced by milling in bond activities, as reported in the Department of Commerce, by crop years ended June 30 (000's omitted):

	Wheat withdrawn bus	Flour exported bbls	Millfeed produced tons	Percentage of total exports
1940-41	7,308	1,534	70	24
1939-40	9,803	1,999	100	20
1938-39	8,748	1,641	102	25
1937-38	2,835	550	32	11
1936-37	13,432	2,679	142	68
1935-36	12,003	2,573	108	76
1934-35	11,172	2,443	95	80
1933-34	10,925	2,402	92	62
1932-33	9,272	2,026	79	46
1931-32	12,825	2,828	111	34
1930-31	19,813	4,179	186	36
1929-30	12,581	2,696	122	21
1928-29	19,877	4,262	179	32
1927-28	14,526	3,004	138	23
1926-27	12,550	2,746	110	20
1925-26	*13,421	2,922	†..	30

*Wheat imported for milling in bond.
†Not reported.

Because of regulations imposed by war conditions the 1941 calendar year figures are not available.

Following is the total of flour exports made from wheat milled in bond, by calendar years, in barrels:

1940	768,780	1931	3,707,055
1939	2,053,896	1930	3,927,000
1938	1,511,579	1929	3,019,000
1937	2,182,611	1928	3,932,000
1936	2,681,645	1927	2,457,000
1935	2,359,906	1926	3,041,000
1934	2,372,026	1925	2,311,000
1933	2,212,173	1924	2,107,000
1932	2,183,995	1923	2,220,000

Canadian Flour Production

Production of flour in Canada, by months, in the crop year 1940-41, together with quantities exported, and comparison of totals for previous years, in barrels:

	Total Canada	Wheat flour exported
August	1,291,451	575,756
September	1,635,849	550,754
October	1,872,514	750,193
November	1,588,428	682,718
December	1,076,132	345,611
January	1,177,369	354,818
February	1,462,187	606,757
March	1,476,673	559,139
April	1,660,897	849,816
May	2,121,397	1,340,686
June	2,117,976	1,750,924
July	2,116,896	1,921,655
	19,597,769	10,288,827
1939-40	17,749,764	6,781,367
1938-39	15,234,065	4,604,245
1937-38	12,869,961	3,609,656
1936-37	14,276,607	4,525,665
1935-36	14,910,380	4,978,917
1934-35	14,168,621	4,750,310
1933-34	14,942,257	5,454,636
1932-33	15,012,865	5,370,613
1931-32	14,631,504	5,383,594

United States—Largest Wheat Flour Milling Companies

The following list comprises companies which own and operate one or more mills with a combined daily capacity of 3,000 bbls or over:

	Daily capacity, bbls
General Mills, Inc., Minneapolis, Minn.	70,650
Pillsbury Flour Mills Co., Minneapolis, Minn.	39,000
Commander-Larabee Milling Co., Minneapolis, Minn.	22,200
Russell-Miller Milling Co., Minneapolis, Minn.	18,500
Colorado Milling & Elevator Co., Denver, Colo.	16,700
Tex-O-Kan Flour Mills Co., Dallas, Texas	15,200
International Milling Co., Minneapolis, Minn.	14,500
Standard Milling Co., Chicago, Ill.	12,700
National Milling Branch of National Biscuit Co., Toledo, Ohio	8,500
Flour Mills of America, Inc., Kansas City, Mo.	8,400
Centennial Flouring Mills Co., Seattle, Wash.	7,000
King Midas Flour Mills, Minneapolis, Minn.	6,700
Fisher Flouring Mills, Seattle, Wash.	6,000
Igleheart Bros., Inc., Evansville, Ind.	5,900
Montana Flour Mills Co., Great Falls, Mont.	5,450
Rodney Milling Co., Kansas City, Mo.	5,000
Bay State Milling Co., Winona, Minn.	5,000
Quaker Oats Co., Chicago, Ill.	4,600
Nebraska Consolidated Mills Co., Omaha, Neb.	4,100
North Dakota Mill & Elevator Association, Grand Forks, N. D.	4,000
Midland Flour Milling Co., Kansas City, Mo.	3,850
Kansas Milling Co., Wichita, Kansas	3,800
Dixie-Portland Flour Mills, Memphis, Tenn.	3,800
Consolidated Flour Mills Co., Wichita, Kansas	3,750
United Mills Co., Inc., Kansas City, Mo.	3,500
Acme-Evans Co., Indianapolis, Ind.	3,400
Houston Milling Co., Houston, Texas	3,300
B. A. Eckhart Milling Co., Chicago, Ill.	3,200
Eagle Roller Mill Co., New Ulm, Minn.	3,000
Ballard & Ballard Co., Inc., Louisville, Ky.	3,000

UNITED STATES CROP YEAR FLOUR PRODUCTION BY STATES AND BY MONTHS

Wheat flour production by states for crop years ended June 30, 1941, as compiled by the Department of Commerce from reports by mills which normally produce 5,000 bbls or more of flour per year:

	July	August	September	October	November	December	January	February	March	April	May	June	Total
Kansas	1,290,319	1,248,318	1,322,362	1,424,735	1,341,419	1,274,086	1,355,926	1,241,370	1,366,110	1,360,389	1,394,983	1,341,685	15,961,702
New York	1,043,796	1,159,152	1,175,062	1,208,962	1,013,457	1,025,747	1,154,776	1,069,036	1,181,188	1,180,440	1,030,011	1,027,609	13,269,236
Minnesota	912,185	1,000,176	1,110,446	1,070,956	947,509	789,440	893,941	856,824	837,912	845,631	843,410	877,661	10,986,091
Missouri	753,384	716,037	761,278	821,365	699,728	722,748	743,941	693,687	742,933	756,085	726,182	716,791	8,854,159
Texas	578,864	574,414	637,155	654,515	569,138	525,068	577,128	499,637	537,905	543,342	508,837	510,100	6,716,103
Illinois	467,737	468,136	507,901	460,909	431,493	400,375	447,695	435,138	445,614	468,672	397,824	452,587	5,384,081
Washington	355,677	412,010	381,021	526,710	482,668	422,408	396,991	316,754	403,911	499,853	519,211	557,747	5,274,961
Oklahoma	352,219	390,384	410,771	434,500	369,217	330,887	409,651	347,823	387,326	378,206	348,182	355,536	4,514,702
Ohio	363,266	352,791	354,508	423,238	339,531	339,403	349,890	323,651	352,461	358,790	338,207	292,831	4,188,567
Oregon	258,447	315,200	312,508	371,830	317,591	283,468	295,364	292,867	301,470	331,249	307,714	304,974	3,692,682
Nebraska	256,377	247,493	250,395	263,932	252,705	232,064	245,303	223,438	251,447	247,777	253,281	257,656	2,981,868
Indiana	217,321	182,542	188,603	245,365	190,878	191,318	207,960	189,348	217,599	228,989	202,602	161,557	2,424,082
Iowa	198,380	196,594	195,338	219,957	169,699	194,577	190,006	191,737	198,796	208,376	186,731	179,706	2,329,897
California	160,999	181,105	178,490	216,872	176,177	171,088	189,153	188,320	199,521	214,608	198,320	184,368	2,259,021
Tennessee	147,482	151,085	176,999	186,961	161,078	155,810	174,724	158,176	165,866	172,070	162,249	156,910	1,969,410
Michigan	123,991	139,442	138,571	152,366	129,150	122,356	124,391	99,984	121,963	147,710	145,162	133,800	1,578,826
Virginia	141,272	136,626	145,210	155,734	150,909	127,293	148,789	120,654	143,517	132,459	132,345	122,530	1,657,338
Kentucky	130,130	139,851	132,804	147,644	121,134	116,949	138,691	116,691	131,720	131,099	124,107	111,258	1,542,078
Montana	76,964	97,847	107,944	126,431	115,022	69,861	79,175	55,859	82,051	81,738	90,757	115,840	1,099,496
Pennsylvania	74,688	103,632	103,923	113,429	91,547	88,360	83,741	83,160	87,474	88,493	82,770	85,155	1,086,372
Utah	89,231	109,052	104,396	119,968	100,507	88,509	94,012	103,306	96,885	103,128	108,458	98,237	1,215,689
Colorado	103,033	96,082	97,955	109,358	95,896	112,961	90,621	90,320	94,844	95,038	88,512	87,213	1,161,833
North Dakota	80,184	111,981	147,730	125,790	127,809	74,849	78,643	60,369	76,862	89,250	104,352	91,724	1,169,543
N. Carolina	93,231	84,523	83,924	90,308	76,312	72,924	81,185	76,923	82,903	83,196	80,385	75,338	981,152
Idaho	54,546	55,205	40,280	40,360	38,115	34,952	35,976	28,482	34,056	49,435	35,515	53,969	500,891
Maryland	30,618	35,051	35,118	43,903	40,601	29,926	34,330	29,932	36,886	31,923	28,717	18,393	395,398
Georgia	23,394	25,225	25,635	31,709	28,304	27,011	28,428	21,979	20,663	20,720	16,387	20,986	290,441
Wisconsin	43,073	65,431	74,330	82,155	76,579	72,987	87,650	82,002	89,578	76,500	72,661	76,555	899,501
Wyoming	7,180	7,373	7,218	11,550	10,363	8,577	7,949	5,510	7,339	8,173	8,973	10,052	100,257
S. Carolina	17,088	12,265	10,724	11,387	8,799	7,105	8,247	6,361	7,519	7,390	7,105	10,273	114,263
W. Virginia	7,065	7,658	8,145	9,014	7,993	6,313	7,739	6,572	6,031	5,853	6,330	6,404	85,117
Other states	52,259	58,653	61,465	57,916	55,393	46,306	55,968	47,203	53,293	55,369	45,675	56,180	645,680
Totals	8,504,400	8,881,334	9,288,209	9,959,829	8,736,721	8,165,733	8,817,984	8,063,113	8,763,643	9,001,951	8,595,895	8,551,625	105,330,437

UNITED STATES CROP YEAR FLOUR PRODUCTION BY STATES

Wheat flour production by states for crop years ended June 30, as compiled by the Department of Commerce from reports by mills which normally produce 5,000 bbls or more of flour per year:

State—	1940-41	1939-40	1938-39	1937-38	1936-37	1935-36
Kansas	15,961,702	16,037,057	15,466,919	14,582,786	15,914,855	13,370,810
Minnesota	10,986,091	11,510,168	11,969,067	11,284,028	11,221,489	13,159,380
New York	13,269,236	12,526,663	13,029,246	12,398,291	12,900,903	13,041,555
Missouri	8,854,159	9,414,609	9,762,099	9,830,901	8,901,216	7,983,722
Texas	6,716,103	6,722,174	6,225,219	7,048,089	6,201,394	5,394,940
Illinois	5,384,081	5,363,018	5,850,979	5,683,423	4,891,519	4,903,940
Washington	5,274,961	4,907,704	5,062,838	4,705,767	4,605,936	4,482,320
Oklahoma	4,514,702	4,387,091	4,139,847	4,181,046	3,857,730	3,380,283
Ohio	4,188,567	3,821,406	3,697,355	3,414,410	3,610,105	3,634,611
Nebraska	2,981,868	3,156,002	2,968,752	2,889,934	3,119,005	2,681,235
Oregon	3,692,682	3,284,355	3,371,311	2,695,672	2,777,978	3,170,433
Indiana	2,424,082	2,805,426	2,579,090	2,308,854	2,591,202	2,716,647
California	2,259,021	2,095,575	2,205,102	2,414,494	2,162,279	1,973,231
Iowa	2,329,897	2,272,925	2,158,951	1,761,593	1,628,502	1,653,609
Michigan	1,578,826	1,699,313	1,701,492	1,555,237	1,597,877	1,692,384
Colorado	1,161,833	1,208,207	1,142,118	1,039,082	1,148,782	1,060,693
Montana	1,099,496	1,329,153	1,377,395	1,105,282	1,135,476	1,493,254
Tennessee	1,969,410	1,790,827	1,814,768	1,793,971	1,700,432	1,627,425
Utah	1,215,689	1,195,932	1,245,553	1,365,020	1,272,631	1,325,728
Kentucky	1,542,078	1,436,665	1,706,812	1,767,635	1,311,078	1,281,744
Pennsylvania	1,086,372	1,171,972	1,260,946	1,318,386	1,386,903	1,457,492
North Dakota	1,169,543	1,131,564	894,119	893,868	1,032,269	1,442,442
Wisconsin	899,501	425,639	101,576	445,390	488,101	597,433
North Carolina	981,152	980,725	1,018,253	1,006,960	911,462	994,121
Virginia	1,657,338	1,623,122	1,690,611	1,425,511	1,342,385	1,199,581
Idaho	500,891	563,328	542,608	468,870	616,162	639,758
Maryland	395,398	382,284	353,623	354,081	654,834	633,629
South Dakota	*.....	175,188	168,933	121,080	119,034	152,652
South Carolina	114,263	87,168	88,402	81,286	*.....	*.....
Georgia	290,441	276,445	364,519	357,120	310,241	*.....
West Virginia	85,117	90,409	75,346	90,070	115,353	*.....
Wyoming	100,257	109,791	113,557	100,570	83,778	*.....
All other†	645,680	466,651	490,354	484,889	563,072	1,275,947
United States	105,330,437	104,448,505	104,637,760	100,973,596	100,263,678	98,420,999

*Included with all others. †Includes Alabama, Arizona, Arkansas, Delaware, District of Columbia, New Hampshire, New Jersey and New Mexico.

UNITED STATES CALENDAR YEAR FLOUR PRODUCTION

The following table shows calendar year production of flour by mills representing 65% of United States capacity, as reported to The Northwestern Miller, in barrels:

Northwest—	1941	1940	1939	1938	1937	1936
Minneapolis	5,622,308	5,241,558	5,559,444	5,736,662	5,681,400	6,452,667
Outside mills*	9,959,356	9,671,030	9,840,293	9,152,130	8,266,449	9,551,618
Totals	15,581,664	14,912,588	15,399,737	14,888,792	13,947,849	16,004,285
Southwest—						
Kansas City	6,841,857	6,212,670	7,246,117	7,479,540	7,332,452	6,202,743
Atchison	.....	.....	.....	.....	1,457,892	1,492,830
Wichita	1,985,962	1,775,505	2,046,025	1,926,516	2,396,146	2,162,953
Salina	2,285,316	2,301,619	2,635,483	2,349,368	2,256,514	2,113,851
Outside mills	15,322,377	14,034,377	13,067,602	12,757,261	12,412,531	12,135,733
Totals	26,435,512	24,324,171	24,995,227	24,512,685	25,855,535	24,108,110
Buffalo	10,180,172	9,803,332	10,188,324	10,200,421	10,251,807	10,425,335
Chicago	1,299,931	1,255,950	1,339,446	1,608,409	1,234,437	1,359,671
Central States	7,987,374	8,197,132	7,968,710	6,534,597	5,542,958	5,937,552
Southeast	†1,242,712	†1,493,399	†1,726,269	3,788,524	3,464,122	3,967,460
North Pacific Coast—						
Seattle	1,286,986	1,330,660	1,452,860	1,207,121	1,172,399	1,259,881
Tacoma	1,960,882	1,922,195	2,008,123	1,952,330	2,045,879	1,715,663
Portland	1,716,665	1,890,111	2,142,365	2,004,218	1,860,133	1,848,049
Outside mills	2,103,207	2,328,863	2,075,380	.....	.....	.....
Totals	7,067,740	7,471,829	7,678,728	5,163,669	5,078,411	4,823,593
Grand totals	69,795,105	67,458,401	69,296,441	66,697,097	65,375,119	66,626,006

*Includes Duluth-Superior and St. Paul. †Revised to include only output of mills in Kentucky, Tennessee, Virginia and Georgia.

Canadian Wheat Ground

Wheat ground by Canadian mills in crop years, from Aug. 1 to July 31:

	Division		Total
	Eastern	Western	Canada
1940-41	44,021,564	43,898,148	87,919,712
1939-40	40,241,848	40,050,860	80,292,708
1938-39	33,872,182	35,071,688	68,943,870
1937-38	28,874,005	28,963,899	57,837,904
1936-37	31,084,124	33,487,099	64,571,223
1935-36	32,230,474	35,489,342	67,719,816
1934-35	30,421,705	33,096,397	63,518,102
1933-34	32,392,676	34,262,991	66,655,667
1932-33	32,260,956	34,531,021	66,791,977
1931-32	31,246,338	34,185,261	65,431,599
1930-31	36,849,478	34,530,981	71,380,459

Canadian Millfeed Production

Millfeed production of Canadian mills, by crop years ending July, in tons (000's omitted):

	Bran	Shorts and middlings	Total
1940-41	304	379	683
1939-40	274	383	657
1938-39	232	326	558
1937-38	184	200	384
1936-37	220	308	528
1935-36	234	318	552
1934-35	215	272	487
1933-34	233	277	510
1932-33	222	281	503
1931-32	211	292	503
1930-31	255	308	563
1929-30	232	330	562
1928-29	296	462	758

UNITED STATES CALENDAR YEAR FLOUR PRODUCTION BY STATES

Wheat flour production by states for calendar years, as compiled by the Department of Commerce, from reports by mills which normally produce 5,000 bbls or more of flour annually, in barrels:

	1941	1940	1939	1938	1937	1936
Kansas	16,276,497	15,417,866	15,963,143	14,996,950	15,139,196	15,066,523
Minnesota	11,244,203	11,153,594	11,883,703	11,645,933	10,980,461	12,726,072
New York	13,566,271	12,644,333	12,690,628	12,852,028	12,554,346	13,480,092
Missouri	9,134,733	8,764,398	9,753,256	9,920,523	9,491,866	8,368,181
Texas	6,249,120	6,997,859	6,283,363	6,468,003	6,829,970	5,801,140
Illinois	5,411,326	5,152,357	5,636,044	6,140,183	4,978,316	5,059,016
Washington	5,042,644	5,001,280	5,189,044	4,555,550	4,782,176	4,376,066
Oklahoma	4,541,346	4,327,899	4,405,590	3,968,766	4,205,595	3,603,041
Ohio	4,391,782	3,989,329	3,789,113	3,531,086	3,516,162	3,666,405
Oregon	3,292,687	3,486,320	3,544,005	2,782,620	2,818,370	2,802,814
Nebraska	3,139,415	3,074,552	3,011,381	2,901,771	3,017,039	2,993,647
Indiana	2,298,431	2,589,505	2,646,053	2,540,855	2,397,147	2,651,879
California	2,271,525	2,121,108	2,147,536	2,306,042	2,328,444	2,014,308
Iowa	2,280,545	2,299,068	2,177,837	1,994,669	1,684,266	1,599,505
Montana	1,152,244	1,122,105	1,433,837	1,243,872	1,130,754	1,239,186
Tennessee	2,018,066	1,844,347	1,769,164	1,839,641	1,726,906	1,740,868
Michigan	1,549,790	1,618,298	1,726,884	1,626,721	1,523,564	1,753,003
Kentucky	1,632,839	1,463,420	1,505,623	1,813,230	1,474,846	1,383,760
Pennsylvania	1,111,868	1,090,007	1,238,609	1,252,877	1,344,866	1,467,871
Colorado	1,125,039	1,164,985	1,221,802	1,045,938	1,131,922	1,079,909
North Dakota	1,237,475	1,135,813	1,014,851	935,495	871,386	1,340,915
Utah	1,249,526	1,152,882	1,236,515	1,331,533	1,278,255	1,361,342
Virginia	1,679,357	1,641,758	1,654,655	1,551,798	1,404,781	1,281,940
North Carolina	976,731	958,867	1,013,194	1,004,230	956,787	965,156
Wisconsin	967,706	657,983	228,932	255,893	440,560	595,844
Maryland	302,813	379,845	373,497	341,524	503,413	684,308
Idaho	560,179	530,300	593,215	454,805	539,937	667,358
South Dakota	†.....	†.....	171,708	144,896	141,223	145,012
Others*	1,288,052	1,214,322	1,070,887	1,141,788	1,109,116	1,263,612
U. States	105,992,210	102,994,400	105,374,069	102,589,220	100,274,670	101,178,773

*Includes Arizona, Arkansas, Delaware, District of Columbia, Georgia, New Hampshire, New Jersey, New Mexico, South Carolina, West Virginia and Wyoming. †Included with others.

UNITED STATES FLOUR PRODUCTION AT CENTERS

Wheat flour production of mills which reported to The Northwestern Miller, at leading centers, by calendar years, in barrels (000's omitted):

	1941	1940	1939	1938	1937	1936	1935	1934	1933	1932
Buffalo	10,180	9,803	10,188	10,200	10,252	10,425	9,635	9,625	9,781	9,789
Kansas City	6,842	6,213	7,246	7,480	7,332	6,203	6,070	5,857	6,091	7,082
Minneapolis	5,622	5,242	5,559	5,737	5,681	6,453	6,636	7,082	7,283	7,227
St. Louis	712	766	886	776	963	950	845	1,024	1,103	1,072
Chicago	1,300	1,256	1,339	1,608	1,234	1,360	1,362	1,298	1,361	1,632
Duluth	985	683	280	256	428	577	484	551	592	607
Omaha	...	...	...	...	...	1,431	1,362	1,318	1,205	999
St. Joseph	...	...	...	...	399	377	558	364	466	553
Tacoma	1,961	1,922	2,008	1,952	2,045	1,716	2,123	1,848	1,444	1,290
Seattle	1,287	1,331	1,453	1,207	1,172	1,260	1,081	1,220	1,034	1,193
Portland	1,717	1,890	2,142	2,004	1,860	1,848	1,647	1,143	1,126	1,282
Toledo	2,254	2,036	2,007	2,071	2,034	2,094	1,754	1,948	2,010	2,230
Atchison	...	...	...	...	1,458	1,493	1,353	1,405	1,406	1,468
Salina	2,285	2,302	2,635	2,349	2,257	2,114	1,855	1,767	1,647	1,902
Philadelphia	...	...	...	...	180	184	179	153	157	168
Wichita	1,986	1,776	2,046	1,927	2,396	2,163	1,893	1,799	2,075	2,484
*Northwestern mills	8,975	8,988	9,560	8,896	7,838	8,974	8,459	9,018	9,180	8,637
†Central States mills	6,348	6,313	5,908	4,641	3,657	3,861	3,663	3,828	3,743	4,235
*St. Louis outside mills	927	1,118	1,175	1,118	923	1,113	1,133	1,599	1,427	1,629
*Southeastern mills	1,243	1,493	1,726	3,789	3,464	3,967	4,231	4,044	3,721	4,054
No. Pacific Coast interior mills	2,103	2,329	2,075	..	..	..	..	..	..	..

*The figures for these mills are exclusive of the amounts ground at the centers listed above. †Output of Toledo flour mills is also included in the statistics for central states mills.

FLOUR PRODUCTION OF SOUTHWESTERN MILLS BY MONTHS

Total flour production, in barrels, by months, as reported to The Northwestern Miller by 55 representative "interior" mills in the Southwest, together with all mills at Kansas City, Wichita, Salina and Atchison:

	1941	1940	1939	1938	1937	1936
January	2,170,483	2,057,669	1,967,695	1,875,644	2,144,494	1,937,302
February	1,989,958	1,876,286	1,780,067	1,787,043	1,896,831	1,898,276
March	2,159,714	1,925,054	2,095,373	2,037,215	2,202,167	1,747,244
April	2,139,269	1,955,957	1,966,226	1,946,623	2,255,981	1,713,724
May	2,155,745	1,965,616	1,931,218	1,894,772	1,970,818	1,793,149
June	2,136,864	1,821,045	2,030,510	2,089,663	2,181,220	1,835,232
Totals	12,752,033	11,601,627	11,771,089	11,630,960	12,651,511	10,924,927
July	2,248,092	2,101,072	2,052,102	2,177,571	2,421,815	2,238,423
August	2,244,221	2,096,776	2,205,795	2,141,646	2,200,688	2,200,239
September	2,370,318	2,121,995	2,662,372	2,200,466	2,191,976	2,137,545
October	2,433,107	2,288,249	2,334,965	2,249,956	2,271,176	2,382,611
November	2,061,596	2,114,191	2,014,031	2,028,645	2,098,340	2,143,665
December	2,326,165	2,000,261	1,954,873	2,083,441	2,020,029	2,130,700
Totals	13,683,499	12,722,544	13,224,138	12,881,725	13,204,024	13,183,183
Grand totals	26,435,512	24,324,171	24,995,227	24,512,685	25,855,535	24,108,110

PRODUCTION AND CAPACITY OF MILLS IN THE SOUTHWEST

Despite the fact that fewer mills were operating than at any time since milling became a principal industry of the Southwest, total production of flour in the Southwest during the crop year ended June 30, 1941, was only slightly under the 10-year output record set in the previous year.

According to reports received by the Kansas City office of The Northwestern Miller, mills in Kansas, Nebraska, Oklahoma, Texas and the Kansas City terminal produced 35,833,678 bbls of flour in the crop year 1940-41, as compared with 36,487,017 for 1939-40. The year's production represents operations of 64.7% of capacity, against 65.4% for 1939-40. Figures were compiled from reports of 239 mills with a total annual capacity of 55,369,500 bbls.

In general, the only states which showed definite increase in activity were Oklahoma and Nebraska. Texas and Kansas remained almost unchanged from the previous year, and production at Kansas City declined about 8%, or 500,000 bbls.

In the Kansas milling centers, Salina showed a sharp decrease of 575,000 bbls, while Wichita and Hutchinson were only slightly under the 1940 level. Omaha again gained a point in its record of steadily increasing production through the years. In the Texas centers, Fort Worth and Dallas declined a little and Sherman showed a gain of two points.

The total number of 239 individual mills, 16 less than last year, does not include 23 existing but inactive mills having a combined capacity of 4,175 bbls, for the reason that these mills either have been idle for three years or more or will, in all probability, never be restored to normal operation; 12 mills were removed because out of business. Virtually no new mills were added during the year, nor were any substantial increases in capacity reported.

By far the greatest part of the 35,800,000 bbls produced by 239 southwestern mills was milled by 65 large mills having a daily capacity of 1,000 bbls or over. These were responsible for nearly 30,000,000 bbls of the total crop year production. Thirty mills in the seven principal milling centers alone produced nearly 16,000,000 bbls.

While the number of mills has continued to decline, there has been little appreciable loss in capacity. Comparison of the figures shown in the tables below will clearly indicate the move toward concentration of the milling industry in fewer mills, which have either sustained or increased their production. The result is that the 1940-41 67% of capacity operations (excluding Texas, for which figures are not available) is the second largest percentage for the past 16 years.

The following tables show full details of capacity and production for the crop year ending June 30, 1941, and for previous years:

CROP YEAR 1940-41

	No. mills	Annual capacity, bbls	Annual output, bbls	Pct. activity	*Pct. increase or decrease
Kan..	77	21,502,500	14,266,695	66.3	—0.7
Texas	45	12,771,000	7,159,175	56.6	same
Okla..	35	6,638,500	4,574,802	68.4	+4.1
Neb...	74	5,407,500	3,381,742	62.5	+3.2
K. C..	8	9,000,000	6,451,264	71.7	—8.1
Tots.	239	55,369,500	35,833,678	64.7	—1.08

*Percentage of increase or decrease from the previous year.

CROP YEAR 1939-40

Kan..	85	21,880,500	14,621,276	66.8	+6.2
Texas	45	12,710,100	7,183,530	56.5	+6.9
Okla..	37	6,657,000	4,357,120	65.6	+4.0
Neb...	80	5,527,500	3,349,094	60.5	+5.1
K. C..	8	9,000,000	6,975,997	77.5	—3.3
Tots.	255	55,775,100	36,487,017	65.4	+4.0

*Percentage of increase or decrease over previous year.

The following tables show in detail the number of flour mills, capacity ratings, amount of flour produced and wheat ground by mills in the states of Kansas, Oklahoma, Nebraska and Texas during the crop year ended June 30, 1941:

Note: Output of nonreporting mills of 200 bbls and less capacity estimated at same rate of activity as reporting mills of like size.

KANSAS

No. mills	Capacity rating, bbls	Daily capacity, bbls	Flour made, bbls	Wheat ground, bus
28	1,000 and over	52,400	11,352,099	51,327,035
20	500 to 1,000.	13,875	2,260,750	10,296,012
14	200 to 500.	4,200	608,559	2,813,773
6	100 to 200.	735	32,208	148,717
9	Less than 100.	465	13,079	62,831
77		71,675	14,266,695	64,648,368

TEXAS

No. mills	Capacity rating, bbls	Daily capacity, bbls	Flour made, bbls	Wheat ground, bus
15	1,000 and over	34,550	5,945,113	26,906,721
8	500 to 1,000.	4,800	865,633	3,898,066
8	200 to 500.	2,275	295,280	1,339,042
4	100 to 200.	490	43,717	202,530
10	Less than 100.	455	9,432	43,764
45		42,570	7,159,175	32,390,123

OKLAHOMA

No. mills	Capacity rating, bbls	Daily capacity, bbls	Flour made, bbls	Wheat ground, bus
9	1,000 and over	14,260	3,342,189	15,178,321
6	500 to 1,000.	4,070	776,033	3,555,657
9	200 to 500.	3,050	403,133	1,861,242
4	100 to 200.	525	20,047	93,470
7	Less than 100.	390	33,400	161,180
35		22,295	4,574,802	20,849,870

NEBRASKA

No. mills	Capacity rating, bbls	Daily capacity, bbls	Flour made, bbls	Wheat ground, bus
5	1,000 and over	9,300	2,429,719	10,918,731
3	500 to 1,000.	1,630	364,521	1,713,143
13	200 to 500.	3,460	335,493	776,165
12	100 to 200.	1,375	110,704	549,895
41	Less than 100	2,260	91,305	439,372
74		18,025	3,381,742	14,397,306

PERCENTAGE OF CAPACITY OPERATED

The following tables show the percentage of output as related to full capacity (based on 300 running days) of mills in the Southwest for the crop year ending June 30, 1941, with previous years for comparison:

	1,000 and over	500 to 1,000	200 to 500	100 to 200	Less than 100	Average
1940-41						
Kan..	72.2	54.2	48.3	14.6	9.3	66.3
Texas.	58.7	56.3	33.7	38.6	16.0	56.5
Okla..	78.0	63.5	44.0	13.1	20.0	68.4
Neb..	87.0	74.5	31.1	26.8	13.5	62.5
1939-40						
Kan..	74.3	54.2	46.9	11.2	10.6	66.8
Texas.	58.7	56.3	33.7	38.6	16.0	56.5
Okla..	67.8	78.1	52.0	12.7	21.5	65.6
Neb..	85.1	70.9	38.4	28.2	9.9	60.5
1938-39						
Kan..	70.4	49.6	39.1	10.5	9.9	62.0
Texas.	54.0	49.6	36.5	54.0	14.1	52.0
Okla..	67.1	68.5	50.0	10.5	22.2	62.1
Neb..	75.9	74.0	36.0	29.2	12.8	55.0
1937-38						
Kan..	66.2	46.6	36.6	12.0	8.3	58.1
Texas.	63.6	49.0	52.1	43.4	11.6	60.0
Okla..	75.3	64.4	57.0	13.1	32.3	67.4
Neb..	73.3	90.1	39.1	30.6	14.9	54.8

CONSOLIDATED BY YEARS

The following tables show the number of active flour mills in the Southwest (including Kansas, Oklahoma, Nebraska and Kansas City, but excluding Texas), their combined daily capacity, the number of barrels of flour produced, number of bushels of wheat ground and percentage of capacity operated, by years ending June 30:

ALL SOUTHWEST

Crop year	No. mills	Daily capacity, bbls	Flour made, bbls	Wheat ground, bus	Pct. of activity
1941.	194	141,995	28,674,503	128,693,736	67.3
1940.	210	143,550	29,303,487	132,626,276	68.0
1939.	226	144,875	28,355,667	128,953,956	65.0
1938.	240	147,247	27,883,306	126,685,867	63.1
1937.	254	150,750	28,826,559	131,970,876	63.7
1936.	260	150,835	24,682,425	113,198,966	54.5
1935.	278	151,650	25,704,766	115,165,958	56.5
1934.	282	148,110	24,706,370	113,089,220	55.6
1933.	240	145,740	28,031,637	127,086,264	64.1
1932.	253	148,085	29,056,725	131,849,090	65.4
1931.	255	146,483	28,844,675	133,121,799	65.6
1930.	266	148,568	29,598,716	136,166,677	66.3
1929.	281	151,478	30,597,847	139,944,479	67.3
1928.	294	161,584	27,853,565	126,887,101	57.5
1927.	323	158,002	30,762,840	139,987,846	63.8
1926.	347	154,934	23,448,363	107,436,148	50.6
1925.	374	152,157	27,109,215	123,591,074	59.4

The following supplementary table includes Texas:

1941.	239	184,565	35,833,678	161,083,859	64.7
1940.	255	185,917	36,487,017	164,909,477	65.4
1939.	276	187,867	35,070,382	159,290,920	62.0
1938.	290	190,090	35,641,856	161,827,022	62.4
1937.	312	190,320	35,789,360	168,945,878	62.7

KANSAS

Not including mills located in Kansas City, Kansas:

1941.	77	71,675	14,266,695	64,648,368	66.3
1940.	85	72,935	14,621,276	66,205,622	66.8
1939.	92	73,910	13,765,424	62,758,729	62.0
1938.	95	73,650	12,853,066	58,300,274	58.1
1937.	104	76,495	14,105,856	64,728,468	61.0
1936.	104	76,165	11,813,761	54,206,288	51.7
1935.	107	76,315	12,351,871	56,484,557	53.9
1934.	106	73,255	11,696,987	53,772,008	53.2
1933.	99	74,800	13,726,629	62,184,899	61.1
1932.	100	76,445	14,150,267	64,391,987	61.7
1931.	104	78,065	14,865,407	68,752,379	63.4
1930.	109	79,310	15,084,142	69,335,969	63.3
1929.	112	80,720	16,424,198	74,867,625	67.8
1928.	125	89,165	14,230,332	64,835,126	53.2
1927.	135	88,205	16,512,146	74,431,271	62.0
1926.	150	87,940	12,349,093	56,339,530	46.0
1925.	159	87,285	15,057,031	68,473,048	57.0

The following supplementary table shows details of Kansas production, including Kansas City, Kansas, mills:

1941.	79	80,175	15,719,289	70,225,991	65.4
1940.	87	80,735	16,235,525	73,536,396	67.0
1939.	94	81,710	15,482,873	70,528,168	63.1
1938.	98	84,050	14,676,365	66,544,175	58.2
1937.	107	86,895	15,821,738	72,454,357	60.6
1936.	107	85,895	13,603,008	62,443,969	52.1
1935.	110	86,715	14,045,764	64,231,752	53.9
1934.	109	83,355	13,287,153	60,980,294	53.1
1933.	102	84,900	15,239,980	69,946,375	59.8
1932.	103	86,545	15,879,572	72,265,097	61.1

OKLAHOMA

1941.	35	22,295	4,574,802	20,849,870	68.4
1940.	37	22,190	4,357,120	19,707,460	65.6
1939.	39	22,470	4,188,637	18,827,031	62.1
1938.	41	22,235	4,497,110	20,312,926	67.4
1937.	43	22,435	4,380,249	19,814,273	65.0
1936.	42	22,095	3,878,193	17,542,946	58.5
1935.	42	21,620	4,269,916	17,243,379	65.8
1934.	43	20,765	4,129,657	18,848,590	66.3
1933.	36	19,980	4,580,977	20,788,318	76.5
1932.	38	20,630	4,377,834	19,940,134	70.5
1931.	36	17,345	2,880,607	13,197,453	55.3
1930.	39	17,910	3,262,310	14,929,324	60.7
1929.	43	18,310	2,739,870	12,509,431	49.8
1928.	49	19,000	2,626,130	11,964,160	46.1
1927.	50	17,790	3,358,651	15,204,292	62.0
1926.	57	18,580	2,596,326	11,848,492	46.0
1925.	59	18,292	2,807,892	12,691,075	51.0

NEBRASKA

1941.	74	18,025	3,381,742	14,397,306	62.5
1940.	80	18,425	3,349,094	15,363,764	60.5
1939.	87	19,295	3,184,203	14,766,966	55.0
1938.	95	19,560	3,215,077	15,126,066	54.8
1937.	98	20,020	3,556,288	16,596,742	59.2
1936.	105	20,775	3,033,502	13,986,684	48.6
1935.	120	21,915	3,003,208	13,776,297	45.6
1934.	124	22,290	2,953,149	13,570,495	44.1
1933.	96	19,160	3,187,841	14,730,454	55.4
1932.	96	19,160	3,217,252	14,821,678	55.9
1931.	106	19,623	3,472,711	16,092,797	58.9
1930.	109	19,898	3,428,256	15,910,947	57.5
1929.	117	20,998	3,524,914	16,186,644	55.9
1928.	111	21,379	3,546,364	15,814,416	55.3
1927.	129	22,057	3,674,203	17,150,219	55.0
1926.	141	22,154	3,047,514	14,153,148	45.0
1925.	147	22,340	3,461,078	15,824,167	51.0

TEXAS

1941.	45	42,570	7,159,175	32,390,123	56.6
1940.	45	42,367	7,183,530	32,283,201	56.5
1939.	50	42,992	6,714,715	30,336,964	52.0
1938.	50	43,055	7,758,550	35,141,155	60.0
1937.	58	39,570	6,962,801	31,975,002	58.6

(No prior figures available on Texas)

PRODUCTION AT CENTERS

The following tables show details of capacity and production at the principal milling centers during the crop year ended June 30, 1941, with previous years for comparison (Kansas City figures include both Kansas City, Mo., and Kansas City, Kansas. No figures are available for Texas centers prior to 1937):

KANSAS CITY

	Yearly capacity	Flour made	Pct. of activity
1941.....	9,000,000	6,451,264	71.7
1940.....	9,000,000	6,975,997	77.5
1939.....	8,890,000	7,217,403	81.2
1938.....	9,540,000	7,318,053	76.7
1937.....	9,540,000	6,784,166	71.1
1936.....	9,540,000	5,956,969	62.4
1935.....	9,540,000	6,079,771	63.7
1934.....	9,540,000	5,926,577	62.0
1933.....	9,540,000	6,536,190	68.5
1932.....	9,540,000	7,311,372	76.6
1931.....	9,435,000	7,625,950	80.8
1930.....	9,435,000	7,324,008	82.9
1929.....	9,435,000	7,908,865	83.8
1928.....	9,612,000	7,450,739	77.5
1927.....	8,985,000	7,217,840	80.0
1926.....	7,878,000	5,455,430	69.0
1925.....	7,727,400	5,783,214	74.8

WICHITA

1941.....	2,835,000	1,957,429	69.0
1940.....	2,835,000	1,886,162	66.5
1939.....	2,835,000	1,943,078	68.5
1938.....	3,120,000	2,227,413	71.4
1937.....	3,120,000	2,490,813	79.8
1936.....	3,120,000	1,764,469	56.5
1935.....	3,120,000	1,857,994	59.5
1934.....	3,120,000	1,868,572	59.8
1933.....	3,120,000	2,398,725	76.9
1932.....	3,120,000	2,323,035	74.4
1931.....	2,970,000	1,607,839	54.1
1930.....	3,030,000	1,951,778	64.4
1929.....	3,120,000	1,940,394	62.1
1928.....	3,120,000	1,766,196	56.6
1927.....	3,120,000	2,268,344	70.0
1926.....	3,327,300	1,566,594	47.0
1925.....	3,466,980	2,034,740	58.0

SALINA

1941.....	2,805,000	1,979,956	70.6
1940.....	2,805,000	2,556,173	91.1
1939.....	2,805,000	2,619,754	93.4
1938.....	2,700,000	2,077,302	76.9
1937.....	2,700,000	2,185,911	80.9
1936.....	2,700,000	1,883,504	69.7
1935.....	2,700,000	1,805,019	66.8
1934.....	2,400,000	1,674,990	69.7
1933.....	2,400,000	1,968,366	82.0
1932.....	2,400,000	1,977,770	82.4
1931.....	2,400,000	2,123,788	88.4
1930.....	2,400,000	1,893,794	78.9
1929.....	2,400,000	1,985,926	82.7
1928.....	2,400,000	1,889,481	78.7
1927.....	2,400,000	1,505,045	61.0
1926.....	2,175,600	1,298,624	59.0
1925.....	2,235,000	1,262,705	56.0

HUTCHINSON

1941.....	1,710,000	997,448	57.2
1940.....	1,740,000	1,054,915	60.6
1939.....	1,740,000	1,089,937	62.6
1938.....	1,710,000	1,137,270	66.5
1937.....	1,710,000	1,159,841	67.8
1936.....	1,755,000	1,097,136	62.5
1935.....	1,755,000	1,111,996	63.4
1934.....	1,560,000	970,487	62.2
1933.....	1,560,000	1,078,047	69.1
1932.....	1,560,000	647,513	41.5
1931.....	1,560,000	474,953	30.4
1930.....	1,530,000	528,311	34.5
1929.....	1,530,000	1,152,330	75.3
1928.....	1,530,000	920,597	60.1
1927.....	1,530,000	1,245,151	81
1926.....	1,530,000	944,092	61.7
1925.....	1,560,000	1,096,043	70

OMAHA

1941.....	1,590,000	1,556,409	97.8
1940.....	1,590,000	1,537,216	96.6
1939.....	1,590,000	1,338,599	84.2
1938.....	1,650,000	1,272,531	77.1
1937.....	1,650,000	1,342,894	81.4
1936.....	1,650,000	1,220,037	73.9
1935.....	1,650,000	1,287,030	78.0
1934.....	1,500,000	1,214,291	80.9
1933.....	1,369,500	1,228,350	89.7
1932.....	1,249,500	1,169,830	93.6
1931.....	1,249,500	1,169,832	93.6
1930.....	1,267,500	1,202,437	94.8
1929.....	1,267,500	1,156,531	91.2
1928.....	1,260,000	1,221,783	96.9
1927.....	1,365,000	1,159,381	86
1926.....	1,419,600	1,048,827	73
1925.....	1,455,000	1,043,544	71

FORT WORTH—DALLAS

1941.....	4,140,000	1,970,129	47.6
1940.....	3,870,000	2,006,890	51.8
1939.....	3,870,000	1,887,350	48.7
1938.....	3,785,000	2,310,794	61.8
1937.....	3,555,000	1,966,912	55.5

SHERMAN

1941.....	1,485,000	1,005,127	67.7
1940.....	1,485,000	979,412	65.9
1939.....	1,485,000	897,102	60.4
1938.....	1,770,000	1,178,547	66.5
1937.....	1,560,000	1,035,488	66.3

SOUTHWESTERN FLOUR MILLING CENTERS

Following are mills at the principal centers in the Southwest, with daily capacity in barrels:

Kansas City Flour Mills

Kansas Flour Mills Co.	3,300
Larabee Flour Mills Co. (Monarch mill)	5,500
Midland Flour Milling Co.	1,900
Rodney Milling Co.	3,000
Standard Milling Co.	6,500
United Mills Co., Inc.	2,000
Washburn Crosby Company	6,500
Total	28,700
Waggoner-Gates Milling Co. (Independence, Mo.)	1,300
Total	30,000

Atchison (Kansas) Flour Mills

Blair Milling Co.	2,000
Pillsbury Flour Mills Co.	2,500
Total	4,500

Salina (Kansas) Flour Mills

H. D. Lee Flour Mills Co.	1,900
Robinson Milling Co.	1,350
Shellabarger Mill & Elevator Co.	2,000
Weber Flour Mills Co.	2,500
Western Star Mill Co.	1,500
Total	9,250

Sherman (Texas) Flour Mills

Fant Milling Co.	1,450
Quaker Oats Co.	1,000
Total	2,450

Dallas-Fort Worth (Texas) Flour Mills

Dallas—Morten Milling Co.	3,500
Stanard-Tilton Milling Co.	2,500
Fort Worth—Bewley Mills	2,000
Burrus Mill & Elevator Co.	4,500
Universal Mills	1,800
Total	14,300

Wichita (Kansas) Flour Mills

Kansas Milling Co.	3,300
Red Star Milling Co.	3,650
Wichita Flour Mills Co.	2,500
Total	9,450

Omaha (Neb.) Flour Mills

Omar Mills, Inc.	2,000
Maney Milling Co.	1,500
Nebraska Consolidated Mills	1,800
Total	5,300

Hutchinson (Kansas) Flour Mills

Consolidated Flour Mills Co.	750
William Kelly Milling Co.	2,500
Larabee Flour Mills Co.	2,500
Total	5,750

St. Louis Flour Mills

Flour mills at St. Louis, with daily capacity in barrels:

Baur Flour Mills Co.	750
Ralston-Purina Co. (whole wheat only)	400
Saxony Mills	1,300
Valier & Spies Milling Corp.	4,000
Total	6,450

Chicago Flour Mills

Chicago, Ill., flour mills, with their daily capacity, in barrels:

B. A. Eckhart Milling Co.	3,300
Elam Mills	150
Washburn Crosby Co.	4,550
Total	7,900

PRODUCTION OF FLOUR BY MILLS IN THE NORTHWEST

Flour mills of Minnesota, North Dakota, South Dakota and Montana produced 14,582,164 bbls of flour in the crop year ending Aug. 31, 1941, a decrease of 1.9% compared with the 1939-40 output of 14,878,132 bbls. The figures are based on confidential reports submitted by the mills to The Northwestern Miller. In the 1940-41 crop year, 150 mills were listed as being in operation in the Northwest as against 153 in 1939-40.

Mill mortality, confined as usual to the smaller companies, took its about average toll. Minnesota, including Minneapolis, listed 75 active plants, with 24 mills idle and 11 going out of business during the year. North Dakota reported 25 in operation, 5 idle and 4 out of business. In South Dakota 17 plants were in operation, with 6 mills idle and 4 out of business. The Montana census showed 33 active mills, 7 idle and 5 out of business.

Only North Dakota reported a gain in production, with the 1939-40 figure of 1,209,291 bbls boosted to 1,252,516 bbls for the past crop year. In 1939-40, 24 mills were listed as active, with one more added in 1940-41. In 1939-40, North Dakota again was the only state showing a higher production, the increase amounting to 26.5% compared with the preceding year.

The other states recorded smaller outputs. In Minnesota, including Minneapolis, the figure dropped from 11,946,448 bbls to 11,839,794 bbls, a decrease of 0.9%. South Dakota's output was off 16.6%, dropping from 281,685 bbls in 1939-40 to 236,822 bbls in 1940-41. Montana also recorded a sharp decrease, with the 1939-40 output listed at 1,440,708 bbls, compared with 1,253,032 bbls in 1940-41, a drop of 13.0%.

Minneapolis mills, with 15 active, produced 5,296,798 bbls in the past crop year, as against 5,349,076 bbls in 1939-40, when the same number of plants were in operation.

Because of revisions in milling capacity, Minnesota mills, not including Minneapolis, reported a slight increase in activity during the past year in spite of a smaller output. Activity was figured at 53.7% of capacity, compared with 53.3% in 1939-40. North Dakota's gain in output and drop in capacity advanced the activity figure to 39.2%, compared with 37.6% in 1939-40.

South Dakota's plants operated at 36.0% of capacity as against 40.3% in 1939-40, with both the capacity and output figures lower. In Montana, mills operated at 49.1% of capacity, compared with 55.2% in 1939-40.

Minneapolis mills reported a capacity of 8,955,000 bbls in 1940-41, as against 9,045,000 in 1939-40, and with a drop in flour output, the activity figure remained at 59.1% of capacity.

The larger mills in all four states reported a better average run than did the smaller ones. In Minnesota, for example, mills over 1,000-bbl daily capacity ran approximately 59.3% of their capacity, while those in the 100-bbl and less group ran but 14.0% of capacity.

The consumption of wheat for flour also declined in the past crop year, with mills using 65,620,000 bus, compared with 66,952,000 bus in 1939-40, a drop of 1,332,000 bus. Only North Dakota reported a gain in wheat use amounting to 194,000 bus.

The number of mills in the Northwest has shown a steady decline in recent years. In 1925, for example, 318 mills produced 28,329,112 bbls of flour. The number faded steadily until 1930 when 157 mills reported an output of 22,509,731 bbls. During the next five years the trend was higher until, in 1935, 203 mills were active, although flour production amounted to but 18,346,406 bbls. Since then the number of mills and the output have gradually dropped, with the 1940-41 reports, on which the accompanying tables are based, showing 150 mills active and a flour production of 14,582,164 bbls.

The following figures, compiled by The Northwestern Miller on the basis of confidential reports furnished by the mills, show in detail the production and capacity figures for several years:

PRODUCTION IN BARRELS

The production, in barrels, of the four states for the crop year ended Aug. 31, and for the previous one, with the percentage of increase or decrease and the number of active mills, is shown here:

	Output			No. mills	
	1939-40	1940-41	% inc'se or dec'se	1939	1940
Minn...	11,946,448	11,839,794	—0.9	81	75
N. D...	1,209,291	1,252,516	+3.6	24	25
S. D...	281,685	236,822	—16.6	16	17
Mont...	1,440,708	1,253,032	—13.0	32	33
	14,878,132	14,582,164	—1.9	153	150

*Increase or decrease.

COMPARATIVE FIGURES

A comparative table as to the wheat consumption in two years, in bushels (000's omitted), shows:

Mills in—	1940-41	1939-40	Decrease
Minneapolis	23,836	24,071	235
Minnesota, interior	29,443	29,688	245
Totals	53,279	53,759	480
North Dakota	5,636	5,442	*194
South Dakota	1,066	1,268	202
Montana	5,639	6,483	844
Totals	65,620	66,952	1,332

*Increase.

PERCENTAGE OF CAPACITY OPERATED

Percentage of output to full capacity based on 300 running days of mills of all sizes in the Northwest, by days ending Aug. 31, 1941:

	1,000 and over	500 to 1,000	200 to 500	100 to 200	Less than 100	Average
Minnesota*.	59.3	29.4	25.3	21.9	14.0	53.7
N. Dakota.	45.5	42.6	17.1	20.2	9.0	39.2
S. Dakota..	...	...	45.9	25.9	26.3	36.0
Montana ..	71.0	40.8	...	39.6	25.3	49.1

1939-40 COMPARISON

	1,000 and over	500 to 1,000	200 to 500	100 to 200	Less than 100	Average
Minnesota*.	55.6	32.4	41.3	13.3	16.0	53.3
N. Dakota..	43.3	39.9	27.5	27.0	8.4	37.6
S. Dakota..	...	...	49.7	...	28.1	40.3
Montana ..	71.0	48.4	...	61.9	22.7	55.2

1938-39 COMPARISON

Minnesota*.	63.4	38.7	...	26.0	15.3	57.1
N. Dakota.	30.8	37.2	27.9	19.6	8.1	30.2
S. Dakota..	...	...	56.2	15.6	30.0	38.7
Montana ..	81.6	54.4	...	39.5	26.3	58.9

PRODUCTION IN THE NORTHWEST

The yearly capacity, flour production and percentage of activity for the crop year ended Aug. 31, 1941, of the mills in the Northwest:

1940-41 PRODUCTION

	Yearly capacity	Flour made	Pct. of activity
Minnesota† ...	12,165,000	6,542,996	53.7
North Dakota.	3,187,500	1,252,516	39.2
South Dakota.	657,000	236,822	36.0
Montana	2,548,500	1,253,032	49.1
Minneapolis ..	8,955,000	5,296,798	59.1

†Minneapolis not included.

1939-40 PRODUCTION

	Yearly capacity	Flour made	Pct. of activity
Minnesota† ...	12,373,500	6,597,372	53.3
North Dakota.	3,210,000	1,209,291	37.6
South Dakota.	697,500	281,685	40.3
Montana	2,608,500	1,440,708	55.2
Minneapolis ..	9,045,000	5,349,076	59.1

†Minneapolis not included.

1938-39 PRODUCTION

	Yearly capacity	Flour made	Pct. of activity
Minnesota† ...	11,606,100	6,634,746	57.1
North Dakota.	3,165,000	955,866	30.2
South Dakota.	690,000	267,299	38.7
Montana	2,611,500	1,540,041	58.9
Minneapolis ..	9,045,000	6,710,816	63.1

†Minneapolis not included.

MINNESOTA

The following table shows in detail the number of flour mills in Minnesota (outside of Minneapolis), together with the capacity ratings and the amount of flour produced and wheat ground in the crop year ended Aug. 31, 1941, with previous years' records for comparison:

No. mills	Capacity rating, bbls	Daily capacity, bbls	Flour made, bbls	Wheat ground, bus
16	1,000 and over	33,400	5,941,228	26,735,526
4	500 to 1,000.	2,700	326,588	1,469,648
3	250 to 500.	800	60,727	273,273
11	100 to 250.	1,325	87,243	392,595
12	Less than 100.	630	26,620	119,792
46	mills reporting	38,855	6,442,406	28,990,834
	Mills not reporting, but estimated:			
14	mills	1,695	100,590	452,655
60		40,550	6,542,996	29,443,489

In addition, 24 mills were idle, 11 out of business.

Figures for year ending Aug. 31, 1940:

No. mills	Capacity rating, bbls	Daily capacity, bbls	Flour made, bbls	Wheat ground, bus
16	1,000 and over	34,200	6,062,658	27,281,960
5	500 to 1,000.	3,450	335,390	1,509,255
2	250 to 500.	550	68,280	307,259
9	100 to 250.	1,125	44,930	202,185
12	Less than 100.	675	32,429	145,929
44	mills reporting	40,000	6,543,687	29,446,588
	Mills not reporting, but estimated:			
22	mills	1,245	53,685	241,582
	Totals, 66 Minnesota mills	41,245	6,597,372	29,688,170

In addition, 27 mills were idle, 2 out of business.

NORTH DAKOTA

Figures for year ending Aug. 31, 1941:

No. mills	Capacity rating, bbls	Daily capacity, bbls	Flour made, bbls	Wheat ground, bus
2	1,000 and over.	5,700	777,256	3,497,652
4	400 to 1,000.	3,050	390,279	1,756,254
2	300 to 400.	650	33,410	150,343
3	100 to 200.	375	22,753	102,390
5	Less than 100.	325	8,868	39,908
16	mills reporting	10,100	1,232,566	5,546,547
	Mills not reporting, but estimated:			
9	mills	525	19,950	89,775
25	mills	10,625	1,252,516	5,636,322

In addition, 5 mills were idle, 4 out of business.

Figures for year ending Aug. 31, 1940:

No. mills	Capacity rating, bbls	Daily capacity, bbls	Flour made, bbls	Wheat ground, bus
2	1,000 and over.	5,700	742,054	3,339,245
3	400 to 1,000.	2,650	317,266	1,427,696
3	300 to 400.	1,000	82,794	372,571
3	100 to 200.	425	34,444	155,000
7	Less than 100.	450	11,358	51,111
17		10,225	1,187,916	5,345,623
	Mills not reporting, but estimated:			
7	mills	475	21,375	96,187
24	mills	10,700	1,209,291	5,441,810

In addition, 9 mills were idle, 1 out of business.

SOUTH DAKOTA

Figures for year ending Aug. 31, 1941:

No. mills	Capacity rating, bbls	Daily capacity, bbls	Flour made, bbls	Wheat ground, bus
3	200 to 600...	1,100	151,677	682,545
2	100 to 200...	250	19,466	87,600
3	Less than 100.	135	10,689	48,102
8	mills reporting	1,485	181,832	818,247
	Mills not reporting, but estimated:			
9	mills	705	54,990	247,455
17	mills	2,190	236,822	1,065,702

In addition 6 mills were idle, 4 out of business.

Figures for year ending Aug. 31, 1940:

No. mills	Capacity rating, bbls	Daily capacity, bbls	Flour made, bbls	Wheat ground, bus
4	125 to 600	1,325	197,644	889,400
3	Less than 100.	125	10,541	47,433
7		1,450	208,185	936,833
	Mills not reporting, but estimated:			
9	mills	875	73,500	330,750
16	mills	2,325	281,685	1,267,583

In addition, 11 mills were idle.

MONTANA

Figures for year ending Aug. 31, 1941:

No. mills	Capacity rating, bbls	Daily capacity, bbls	Flour made, bbls	Wheat ground, bus
2	1,000 and over.	2,850	607,128	2,732,074
6	300 to 1,000.	3,725	456,154	2,052,693
4	100 to 300.	725	86,302	388,359
3	Less than 100.	195	14,798	66,591
15	mills reporting	7,495	1,164,382	5,239,717
	Mills not reporting, but estimated:			
18	mills	1,000	88,650	398,925
33	mills	8,495	1,253,032	5,638,642

In addition, 7 mills were idle, 5 out of business.

Figures for year ending Aug. 31, 1940:

No. mills	Capacity rating, bbls	Daily capacity, bbls	Flour made, bbls	Wheat ground, bus
2	1,000 and over.	2,850	607,234	2,732,555
7	300 to 1,000.	4,025	585,370	2,634,166
2	100 to 300.	350	64,953	292,287
4	Less than 100.	215	14,656	65,951
15		7,440	1,272,213	5,724,959
	Mills not reporting, but estimated:			
17	mills	1,255	168,495	758,227
32	mills	8,695	1,440,708	6,483,186

In addition, 13 mills were idle.

CONSOLIDATED BY YEARS

NORTHWEST

Crop year	No. mills	Flour made, bbls	Wheat ground, bus
1940.....	150	14,582,164	65,619,746
1939.....	153	14,878,132	66,951,591
1938.....	157	15,108,772	67,989,474
1937.....	169	14,345,305	64,553,866
1936.....	198	13,966,443	62,848,995
1935.....	203	18,346,406	82,558,825
1934.....	201	15,513,066	69,808,802
1933.....	195	17,200,920	77,404,143
1932.....	185	18,043,600	81,196,197
1931.....	177	17,459,470	78,567,607
1930.....	157	22,509,731	101,293,793
1929.....	212	24,089,127	108,401,066
1928.....	228	26,431,036	118,939,666
1927.....	257	28,774,754	129,486,395

The following tables show the number of active flour mills in Minnesota (Duluth-Superior and St. Paul), North Dakota, South Dakota, Montana and Minneapolis, and includes the daily capacity, the number of barrels of flour produced, the number of bushels ground and percentage of capacity operated, by years ending Aug. 31:

MINNESOTA*

Year ending Aug. 31:

Crop year	No. mills	Daily capacity, bbls	Flour made, bbls	Wheat ground, bus	P. ct. of capacity
1941..	60	40,550	6,542,996	29,443,489	53.7
1940..	66	41,245	6,597,372	29,688,170	53.3
1939..	70	38,687	6,624,746	29,856,355	57.1
1938..	72	41,207	6,172,832	27,777,746	49.9
1937..	83	46,997	6,367,657	28,654,462	46.1
1936..	88	48,647	7,591,274	34,160,736	52.0
1935..	88	49,782	6,084,281	27,379,266	40.7
1934..	85	48,532	6,960,336	31,321,270	47.8
1933..	84	49,775	7,548,556	33,968,504	50.5
1932..	80	49,849	7,522,840	33,852,772	50.3
1931..	74	53,015	9,416,888	42,375,997	59.2
1930..	102	58,500	9,788,248	44,047,114	55.7
1929..	107	60,670	11,146,591	50,159,659	61.2
1928..	125	63,350	12,003,482	54,015,670	63.1
1927..	130	.....	14,211,925	63,953,664	...

*Includes Duluth-Superior and St. Paul.

NORTH DAKOTA

1941..	25	10,625	1,252,516	5,636,322	39.2
1940..	24	10,700	1,209,291	5,441,810	37.6
1939..	23	10,550	955,866	4,301,401	30.2
1938..	26	11,075	984,983	4,432,414	29.6
1937..	39	11,399	1,045,042	4,702,684	30.5
1936..	35	12,485	1,597,293	7,187,813	42.6
1935..	37	12,610	1,173,209	5,279,445	31.0
1934..	34	12,425	1,285,056	5,782,752	34.4
1933..	29	12,570	1,082,311	4,870,398	28.7
1932..	28	12,420	968,175	4,356,787	25.9
1931..	21	10,925	1,306,583	5,879,624	39.8
1930..	27	11,285	1,330,117	5,985,525	39.2
1929..	32	11,860	1,247,715	5,614,718	35.0
1928..	33	11,785	1,400,200	6,300,918	39.6
1927..	37	.....	1,064,878	4,791,948	...

SOUTH DAKOTA

Year ending Aug. 31:

Crop year	No. mills	Daily capacity, bbls	Flour made, bbls	Wheat ground, bus	P. ct. of capacity
1941..	17	2,190	236,822	1,065,702	36.0
1940..	16	2,325	281,685	1,267,583	40.3
1939..	16	2,300	267,299	1,202,844	38.7
1938..	17	2,185	197,114	887,015	30.0
1937..	21	2,360	184,194	828,871	26.0
1936..	22	2,535	248,004	1,116,017	32.6
1935..	24	2,620	202,837	912,770	25.8
1934..	17	2,190	190,137	855,616	28.9
1933..	14	1,775	208,948	940,265	39.2
1932..	14	1,750	198,275	892,236	37.7
1931..	14	1,663	233,935	1,052,708	46.8
1930..	24	2,663	314,671	1,416,020	39.3
1929..	27	2,808	292,737	1,317,318	34.8
1928..	31	3,928	460,632	2,072,846	39.0
1927..	31	.....	358,931	1,615,190	...

MONTANA

1941..	33	8,495	1,253,032	5,638,642	49.1
1940..	32	8,695	1,440,708	6,483,186	55.2
1939..	32	8,705	1,540,041	6,930,184	58.9
1938..	38	8,180	1,237,749	5,569,873	50.4
1937..	39	9,679	1,231,367	6,541,149	42.4
1936..	42	10,710	1,519,971	6,839,871	47.2
1935..	36	10,345	1,766,893	7,951,014	56.9
1934..	43	11,049	1,653,892	7,442,513	49.8
1933..	42	10,474	1,648,626	7,418,814	52.4
1932..	39	8,740	1,008,095	4,536,430	38.4
1931..	29	10,410	1,623,567	7,306,053	51.9
1930..	40	12,010	2,166,132	9,747,592	60.1
1929..	44	13,040	2,376,311	10,693,398	60.7
1928..	48	12,955	2,149,554	9,672,993	55.3
1927..	46	.....	1,908,369	8,587,663	...

MINNEAPOLIS

1941..	15	29,850	5,296,798	23,835,591	59.1
1940..	15	30,150	5,349,076	24,070,842	59.1
1939..	16	30,150	5,710,820	25,698,690	63.1
1938..	16	43,150	5,752,627	25,886,821	44.4
1937..	16	43,150	5,138,183	23,121,829	39.7
1936..	16	46,600	7,389,864	33,254,388	68.3
1935..	16	47,900	6,285,846	22,286,307	41.1
1934..	16	50,900	7,111,499	32,001,746	46.5
1933..	16	55,540	7,555,159	33,998,216	45.3
1932..	16	55,450	7,762,085	34,929,382	46.6
1931..	19	65,850	9,928,758	44,679,411	50.3
1930..	19	67,850	10,489,959	47,204,815	51.5
1929..	18	67,250	11,226,145	50,517,653	55.6
1928..	20	76,800	12,902,419	58,060,885	56.0
1927..	20	83,150	11,184,865	50,331,892	44.8

SUMMARY BY CROP YEARS

No. mills	1940-41—	Output, bbls	Ground, bus
60	Minnesota*	6,542,996	29,443,489
25	North Dakota ...	1,252,516	5,636,322
17	South Dakota ...	236,822	1,065,702
33	Montana	1,253,032	5,638,642
135		9,285,366	41,784,155
15	Minneapolis	5,296,798	23,835,591
150		14,582,164	65,619,746

No. mills	1939-40—	Output, bbls	Ground, bus
66	Minnesota*	6,597,372	29,688,170
24	North Dakota ...	1,209,291	5,441,810
16	South Dakota ...	281,685	1,267,583
32	Montana	1,440,708	6,483,186
138		9,529,056	42,880,749
15	Minneapolis	5,349,076	24,070,842
153		14,878,132	66,951,591

*Includes Duluth-Superior.

No. mills	1938-39—	Output, bbls	Ground, bus
70	Minnesota*	6,634,746	29,856,355
23	North Dakota ...	955,866	4,301,401
16	South Dakota ...	267,299	1,202,844
32	Montana	1,540,041	6,930,184
141		9,397,952	42,290,784
16	Minneapolis	5,710,820	25,698,690
157		15,108,772	67,989,474

*Includes Duluth-Superior.

No. mills	1937-38—	Output, bbls	Ground, bus
72	Minnesota*	6,172,832	27,777,746
26	North Dakota ...	984,983	4,432,414
17	South Dakota ...	197,114	887,015
38	Montana	1,237,749	5,569,870
153		8,592,678	38,667,045
16	Minneapolis	5,752,627	25,886,821
169	Grand totals ..	14,345,305	64,553,866

*Includes Duluth-Superior.

Minneapolis Flour Mill Capacity

Minneapolis flour mills and daily capacities, in barrels of 196 lbs:

Atkinson Milling Co.	2,000
King Midas Flour Mills	900
Minneapolis Milling Co. (Nokomis).	3,000
Standard Milling Co.	3,600
Pillsbury Flour Mills Co.....	6,150
Russell-Miller Milling Co.—A.....	3,500
Washburn Crosby Company	10,900
Total, bbls	30,050

Duluth-Superior Flour Mills

Flour mills of Duluth-Superior, with daily capacities, in barrels:

Mills—Operators—	Bbls
Duluth Universal — Duluth Universal Milling Co.	650
Daisy Mill (King Midas Flour Mills, Minneapolis)	2,800
Total	3,450

Buffalo Flour Mills

Flour mills at Buffalo, N. Y., with daily capacities, Jan. 1, 1941:

George Urban Milling Co.	1,500
Russell-Miller Milling Co.	2,800
Pillsbury Flour Mills Co.	10,000
Washburn Crosby Co.	20,000
Standard Milling Co.	2,600
International Milling Co.	6,500
Buffalo Flour Mills Corp. (operated by Commander Milling Co.)	4,200
Moffitt Milling Corp.	400
Total, bbls	48,000

PRODUCTION OF DURUM PRODUCTS IN THE UNITED STATES

Statistics compiled by the United States Department of Agriculture, showing the production of durum wheat products in the United States:

	Durum wheat ground, bus	Barrels: Semolina* produced	Barrels: *Flour produced	Exports macaroni, etc., lbs
1941—				
July-December	9,319,560	1,482,195	528,155	†.....
January-June	8,204,118	1,375,649	401,404	1,475,196
1940—				
July-December	8,294,842	1,182,979	464,953	1,707,295
January-June	7,210,373	1,175,819	394,009	1,882,683
1939—				
July-December	8,213,310	1,392,707	406,134	2,929,050
January-June	7,231,375	1,256,964	336,818	1,494,226
1938—				
July-December	7,590,460	1,245,377	414,520	1,783,847
January-June	6,881,883	1,141,055	296,777	1,345,699
1937—				
July-December	6,747,909	1,070,141	354,309	1,532,537
January-June	4,872,839	843,685	186,344	1,515,939
1936—				
July-December	7,178,821	1,126,855	354,027	903,537
January-June	7,642,642	1,181,320	343,401	1,042,154
1935—				
July-December	8,079,600	1,277,468	354,860	943,239
January-June	6,779,986	986,318	267,008	1,043,522

*Total production included under semolina when production of semolina and flour is not reported separately. †Not available.

United States Wheat Flour Milling Capacity

The following list, currently compiled by The Northwestern Miller for publication in its "The Northwestern Miller's List of Mills," includes all wheat flour manufacturing establishments in the United States with a 24-hour capacity rating of 25 bbls or more known to be active or potentially active on Jan. 1, 1942, as compared with those so recorded on Jan. 1, 1941:

	1941 No.	1941 Capacity	1942 No.	1942 Capacity
Alabama	6	235	5	1,085
Arizona	5	985	5	985
Arkansas	31	1,920	28	1,570
California	25	10,395	22	9,595
Colorado	40	11,140	36	10,880
Connecticut	2	...	2	...
Delaware	26	1,105	26	1,230
D. of Columbia	1	400	1	400
Florida	1	...	1	...
Georgia	27	2,590	30	2,870
Idaho	43	6,738	34	5,595
Illinois	77	39,155	63	38,045
Indiana	197	27,773	167	22,881
Iowa	64	12,815	34	10,890
Kansas	94	83,515	87	82,075
Kentucky	137	16,945	138	17,120
Maine	3	100	3	100
Maryland	109	8,525	97	7,925
Massachusetts	3	250	2	100
Michigan	206	20,387	182	18,542
Minnesota	108	73,947	97	72,102
Mississippi	...	...	1	250
Missouri	150	56,295	114	54,094
Montana	45	10,550	41	9,750
Nebraska	86	19,440	80	19,025
Nevada	9	420	7	290
N. Hampshire	1	500	1	500
New Jersey	8	1,350	10	1,400
New Mexico	17	1,165	17	1,115
New York	75	59,280	65	58,240
North Carolina	189	14,341	181	13,946
North Dakota	33	11,130	30	10,940
Ohio	224	35,108	203	35,478
Oklahoma	42	23,140	41	23,190
Oregon	37	16,125	32	16,405
Pennsylvania	352	23,623	323	22,467
South Carolina	36	1,945	40	2,285
South Dakota	27	3,500	23	2,540
Tennessee	115	17,446	125	19,026
Texas	54	43,585	51	43,345
Utah	53	8,350	50	8,240
Virginia	342	21,054	322	22,626
Washington	37	27,780	36	27,120
West Virginia	82	5,311	74	4,731
Wisconsin	107	9,480	63	7,195
Wyoming	11	1,560	11	1,580
Totals	3,337	731,398	3,001	709,768

Canadian Milling Capacity

Flour milling capacity of Canada, by provinces, and total cereal milling capacity:

FLOUR MILLS—1942

	No. mills	Bbls daily
Nova Scotia	5	260
New Brunswick	9	510
Prince Edward Island	10	435
Quebec	56	12,980
Ontario	159	50,250
Manitoba	42	11,820
Saskatchewan	76	16,945
Alberta	90	15,020
British Columbia	6	200
	453	108,420

PREVIOUS TOTALS, BBLS

1941	109,020	1930	136,370
1940	108,790	1929	137,415
1939	100,225	1928	135,705
1938	131,990	1927	134,355
1937	133,355	1926	130,005
1936	134,040	1925	137,705
1935	134,040	1924	138,245
1934	134,010	1923	141,640
1933	133,985	1922	139,857
1932	126,850	1921	133,725
1931	133,610	1920	133,520

OATMEAL MILLS

(Daily Capacity, Bbls)

1941	5,375	1930	6,475
1940	5,375	1929	6,475
1939	5,125	1928	5,975
1938	4,175	1927	6,675
1937	5,125	1926	6,855
1936	5,125	1925	6,500
1935	5,825	1924	6,905
1934	5,825	1923	7,655
1933	6,825	1922	8,975
1932	6,825	1921	9,750
1931	6,425	1920	10,125

It should be understood that a number of the mills listed in these tables are old and more or less obsolete. These only come into use as flour mills when there is an exceptional demand for flour at profitable prices. Probably 10% of the listed capacities shown belong in this class.

Canadian City Mill Capacity

Daily flour milling capacity at leading Canadian centers, in barrels:

Montreal, Que.	**10,000**
Port Colborne, Ont.	**12,000**
Keewatin, Ont.	**10,000**
Winnipeg-St. Boniface, Man.	9,000
Saskatoon, Sask.	**8,100**
Medicine Hat, Alta.	**6,000**
Calgary, Alta.	**3,300**
Peterboro, Ont.	4,320
Moose Jaw, Sask.	4,100
Toronto, Ont.	4,175
Goderich, Ont.	**2,500**
Humberstone, Ont.	2,500
Midland, Ont.	**1,200**
Portage la Prairie, Man.	**1,100**
St. Mary's, Ont.	700
Edmonton, Alta.	650
Brantford, Ont.	700
Chatham, Ont.	700
Lethbridge, Alta.	600

Besides these large merchant mills, there are several hundred smaller country mills scattered over the various provinces. The total flour milling capacity of Canada at Jan. 1, 1942, was 108,420 bbls.

Canadian Percentage of Activity

Total wheat flour output and percentage of operation of Canadian mills in crop years, by months, with comparisons:

	1940-41 Output, bbls	1940-41 % operation	1939-40 Output, bbls	1939-40 % operation
August	1,291,451	53.8	1,382,158	59.7
September	1,635,849	76.2	1,927,102	87.3
October	1,872,514	80.0	2,089,562	94.1
November	1,588,428	70.5	1,960,429	86.6
December	1,076,132	47.6	1,599,966	70.8
January	1,177,369	51.5	1,266,303	54.9
February	1,462,187	68.2	1,246,798	55.7
March	1,476,673	64.4	1,257,034	57.2
April	1,660,897	74.8	1,344,293	58.6
May	2,121,397	94.3	1,282,906	55.5
June	2,117,976	96.9	1,170,238	55.3
July	2,116,896	93.5	1,222,975	53.9
	19,597,769	72.5	17,749,764	65.7

Canadian Rolled Oats and Oatmeal Production

Production of rolled oats and oatmeal in Canada by months, in crop years, in lbs:

	1940-41	1939-40	1938-39
August	15,207,924	10,199,372	11,881,407
September	13,066,786	11,617,502	16,174,305
October	17,616,320	13,309,732	25,113,771
November	12,737,370	8,192,908	21,250,138
December	7,797,932	15,897,872	12,524,280
January	5,519,056	23,774,042	13,836,686
February	6,760,614	27,118,186	12,480,222
March	5,999,360	22,433,746	12,457,176
April	13,893,770	21,303,178	7,480,332
May	16,134,100	22,148,397	8,159,778
June	7,956,627	25,079,890	9,221,598
July	15,104,959	14,400,700	10,121,799
	137,794,828	215,475,525	160,701,392

Toledo Flour Mills

Flour mills of Toledo, Ohio, or those having headquarters there, with daily capacity:

	Bbls
National Milling Co.	8,500
Mennel Milling Co.*	2,200
Northwestern Elevator & Mill Co.†	1,200
Total, bbls	11,900

*Mill at Fostoria, Ohio; office at Toledo. †Toledo mill, 750 bbls; Mount Vernon mill, 450 bbls.

FEED MILLS

Feed mills of Toledo, Ohio:
Sheets Elevator Co., 280 tons poultry feed.
Kasco Mills, Inc., commercial feeds.
Toledo Grain & Milling Co., commercial feeds.

Larrowe Milling Co., Rossford (suburb of Toledo), commercial feeds, office at Detroit, Mich.

Seattle-Tacoma Flour Mills

	Daily capacity, bbls
Seattle—	
Fisher Flouring Mills Co.	6,000
Novelty Mill Co.	300
Total	6,300
Tacoma—	
Tacoma Grain Co. (Centennial Mill Co.)	4,500
Sperry Flour Co.	5,000
Total	9,500

PARITY PRICE UNDER THE FEDERAL PRICE CONTROL ACT

Parity prices and parity income as defined by Congress are two methods of expressing economic relationships between agriculture and industry.

The parity price concept was developed after the first World War, but it was not until 1933 that Congress, by enacting the Agricultural Adjustment Act, made price parity for agriculture the basis for national agriculture programs. In 1938 the AAA was amended to include "Parity Income"

"Parity price" of any agricultural commodity as defined in the Agricultural Adjustment Act is that price for the commodity which will give it a purchasing power with respect to articles that farmers buy equivalent to the purchasing power of that commodity in the base period; and, which will also reflect current interest payments per acre on farm indebtedness secured by real estate, tax payments per acre of farm real estate, and freight rates, as contrasted with such interest payments, tax payments, and freight rates during the base period.

"Parity" as applied to income means that per capita net income of individuals on farms from farming operations that bears to the per capita net income of individuals not on farms the same relation as prevailed during the period from August, 1909, to July, 1914.

Parity price of any farm product is computed by multiplying the average farm price of that commodity in the base period by the monthly parity index number. Multiplying the base period (1909-1914) average price of wheat (88.4c) by the parity index number for January, 1942 (146.) indicates a parity price of 139.1c bu of wheat. The average price for wheat received by farmers for January was 106.1c bu.

The parity formula is adjusted each month by the Department of Agriculture in direct relationship to the prices paid by farmers for the things they have to buy.

The major features of the Emergency Price Control Act of 1942 dealing with the control of agricultural products are as follows:

1. Prices of both agricultural products and commodities processed or manufactured wholly or in substantial part from agricultural commodities are subject to control.

2. Only maximum market prices may be established.

3. The range within which maximum prices may be established is restricted. No price may be fixed below 110% of parity nor below certain other specified levels.

4. Purchases and sales by governmental agencies are permitted, but are subject to restrictions.

5. Any action respecting agricultural commodities is subject to prior approval by the Secretary of Agriculture.

6. Present and future marketing agreements affecting agricultural commodities, as provided by the Agricultural Marketing Act of 1937, are wholly without the scope of this act.

The following table shows the different prices, the highest of which, according to the above provisions, determines the lowest price which may be set:

Commodity and unit—	Oct. 1, 1941*	Dec. 15, 1941	Average, 1919-29	110% of parity on Jan. 15†	Per cent price on Jan. 15 was of parity
Wheat, cents per bushel	**93.4**	**102.2**	**132.5**	**142.0**	82
Corn, cents per bushel	**67.8**	**66.9**	**88.9**	**103.1**	78
Oats, cents per bushel	**39.4**	**45.2**	**47.4**	**64.1**	89
Barley, cents per bushel	**50.5**	**56.1**	**69.3**	**99.4**	67
Rye, cents per bushel	**54.3**	**57.8**	**97.4**	**115.6**	62
Flaxseed, dollars per bushel	**1.74**	**1.78**	**2.34**	**2.72**	79
Rice, cents per bushel	**143.9**	...	...	**130.6**	133
Cotton, cents per pound	**17.04**	**16.23**	**21.4**	**19.91**	94
Cottonseed, dollars per ton	**50.36**	**44.65**	**34.44**	**36.21**	131
Potatoes, cents per bushel	**65.8**	**82.7**	**125.0**	**114.0**	93
Sweet potatoes, cents per bushel	**90.2**	**86.6**	**136.2**	**141.0**	73
Peanuts, cents per pound	**4.45**	**4.79**	**5.83**	**7.7**	73
Hogs, dollars per 100 pounds	**10.59**	**10.21**	**9.77**	**11.59**	100
Beef cattle, dollars per 100 lbs.	**9.27**	**9.38**	**6.87**	**8.37**	128
Veal calves, dollars per 100 lbs.	**11.20**	**11.22**	**9.65**	**10.85**	123
Lambs, dollars per 100 pounds	**9.75**	**9.86**	**10.98**	**9.43**	130
Butterfat, cents per pound	**37.1**	**36.0**	**44.0**	**44.6**	90
Chicken, cents per pound	**16.2**	**15.8**	**21.4**	**18.3**	102
Eggs, cents per dozen	**31.1**	**34.1**	**32.2**	**32.8**	105
Wool, cents per pound	**36.3**	**37.1**	**34.1**	**29.4**	139
Hay, dollars per ton	**8.14**	**9.43**	**13.59**	**19.06**	69
Soybeans, dollars per bushel	...	1.47	....	1.53	119

*Prices shown in this column are approximations. †Parity prices may change monthly with changing price levels. Minimum ceiling prices in boldface type.

Corn Millers' Package Differentials

Following are the package differentials established by the American Corn Millers Federation, effective August 6, 1941:

COTTON

*Charge per bbl over bulk price for handling and packing buyer's new and used packages, per bbl.

Weight, lbs	Kind		Number to bbl	*Charge
100	Cotton	Basis	2	$...
98	Cotton	$ .05 under basis	2	...
96	Cotton	.10 under basis	2	...
50	Cotton	.15 over basis	4	.04
49	Cotton	.10 over basis	4	.04
48	Cotton	Same as basis	4	.04
25	Cotton	.30 over basis	8	.08
24	Cotton	.15 over basis	8	.08
20	Cotton	.35 over basis	10	.10
12	Cotton	.45 over basis	16	.16
10	Cotton	.70 over basis	20	.20
9	Cotton	.40 over basis	20	.20
6	Cotton	.85 over basis	32	.24
5	Cotton	1.15 over basis	40	.30
3	Cotton	1.60 over basis	64	.48
2½	Cotton	2.15 over basis	80	.60
50	Paper	.05 over basis	4	.04
49	Paper	Same as basis	4	.04
48	Paper	.05 under basis	4	.04
25	Paper	.15 over basis	8	.08
24	Paper	.05 over basis	8	.08
20	Paper	.25 over basis	10	.10
12	Paper	.25 over basis	16	.16
10	Paper	.50 over basis	20	.20
9	Paper	.20 over basis	20	.20
6	Paper	.55 over basis	32	.24
5	Paper	.80 over basis	40	.30
3	Paper	1.20 over basis	64	.48
2½	Paper	1.55 over basis	80	.60
2	Paper	1.85 over basis	96	.72
1½	Paper	2.45 over basis	128	.85
1	Paper	4.15 over basis	200	1.30
196	Wood	1.00 over basis	...	.25
200	Wood	1.10 over basis	...	.25
140	Jute	Same as basis	1.4	...
100	Jute	.10 over basis	2	...
98	Jute	.05 over basis	2	...
96	Jute	Same as basis	2	...

	Additional per bbl
Outside jute envelopes (2 to bbl)	45c
Outside jute envelopes (4 to bbl)	60c
Outside cotton envelopes (2 to bbl)	50c
Outside fiber containers (4 to bbl)	45c
Outside paper envelopes (4 to bbl)	35c
Outside paper envelopes (8 to bbl)	50c
	Per bbl
Charge for handling and packing buyer's outside paper, cotton, or jute, envelopes	10c
Charge for handling and packing buyer's fiber cartons	15c

1. Charges for packing in buyer's new bags should apply to all contracts booked on bulk basis for shipment in buyer's new bags.

2. All bulk contracts should be booked basis 100 lbs net. If shipments are made in buyer's bags, an allowance should be made by seller for 4 lbs meal saved in packing sizes taking 196 lbs meal, and 8 lbs meal saved in packing sizes taking 192 lbs, and 20 lbs saved in packing sizes taking 180 lbs. All adjustments to be made on basis of contract price of meal.

3. If mill is required to buy new bags for buyer's account when contract is booked basis bulk, then the invoice price of the corn products should be the bulk price, to which should be added the current market price of 1,000-bag lots of a 100-lb cotton bag, plus the current small lot printing differential plus the differentials for other packages as provided below.

4. All transportation costs on all shipments of buyer's packages to the mill, including freight, express, cartage or special handling in transit should be paid by the buyer. Where mending is necessary actual expense involved should be charged by the seller.

5. Package sizes not provided for in the schedule should not be used.

6. Extra charges assessed by the bag companies for printing lots of less than 1,000 private brand bags should be charged to the buyer.

The Allied Trades of the Baking Industry (Canada), Inc.

President, C. E. Soward, Maple Leaf Milling Co., Ltd., Toronto; vice president, T. E. Andrews, Canadian Doughnut Co., Ltd., Toronto; treasurer, Norman Tolton, Standard Brands, Ltd., Toronto; secretary, W. E. Floody, The Bakers Journal, 21 King Street, East, Toronto, Ont.

Ontario Bakers Association

Honorary president, Frank G. Lawson, Moss, Lawson & Co., Toronto, Ont; president, Clare B. Wright, Wright's Sanitary Bakery, St. Catharines, Ont; vice president, G. Cecil Morrison, Morrison-Lamothe Bakery, Ltd., Ottawa, Ont; honorary treasurer, L. D. Jackson, Jackson's Bread, Ltd., Hamilton, Ont; treasurer, H. W. Carpenter, John McHutchion, Ltd., Brantford, Ont; secretary, Robert H. Ackert, 48 Leeming St., Hamilton, Ont.

Canadian Feed Manufacturers Association

President, W. D. Price, Ralston Purina Co., Ltd., Woodstock, Ont; vice presidents, J. G. Davidson, Maple Leaf Milling Co., Ltd., Montreal; F. W. Presant, Toronto Elevators, Ltd., Toronto; secretary-treasurer, G. Scott Brooks, E. W. Perrin Co., Montreal.

Ontario Flour Millers Association

President, F. H. Dunsford, Great Star Flour Mills, Ltd., St. Mary's (Ont.); vice president, C. R. Hunt, Hunt Milling Corp., London; treasurer, G. W. Baldwin, Aurora (Ont.) Flour & Feed Mills, Ltd; secretary, G. S. McArthur, 164 Jane Street, Toronto.

Canadian National Millers' Association

Chairman, D. C. MacLachlan, president and general manager Maple Leaf Milling Co., Ltd., Toronto, Ont; vice chairman, R. E. Cutting, vice president, Canada, the Quaker Oats Co., Peterborough, Ont; secretary, D. E. Murphy, Board of Trade Bldg., Montreal, Que.

UNITED STATES IMPORTS AND EXPORTS OF GRAIN AND ITS PRODUCTS

A Section Devoted to Statistics Giving Particulars of the Foreign Trade of the United States in Grain and Its Products —Figures Show Trade for a Number of Years and Give Full Particulars of Countries of Destination, Customs District From Which Shipped, Etc.

United States Wheat Flour Exports in 1941*

Wheat flour exports from the United States by months from Jan. 1 to March 31, 1941, with countries of destination, as officially reported by the United States Department of Commerce, in barrels of 196 lbs (000's omitted):

To—	Jan.	Feb.	Mch.
Finland	..	22	23
Spain	..	16	..
Other Europe	2	..	1
Canada	2	3	1
Costa Rica	10	10	11
Cuba	83	147	64
Colombia	1	1	1
Brazil	6	11	11
British West Indies	..	..	1
Guatemala	5	9	9
Honduras	1	1	1
Nicaragua	5	3	9
Panama Republic	11	9	6
Panama Canal Zone	6	5	8
Salvador	4	3	3
Mexico	2	3	2
Dominican Republic	6	4	4
Netherlands West Indies	5	4	6
French West Indies	31	21	14
Haiti	8	5	6
Ecuador	10	10	11
Surinam	3	4	3
Peru	1	2	1
Venezuela	41	30	38
China	74	48	39
Hongkong	4	44	4
Philippine Islands	54	85	65
Gold Coast	7	7	9
Nigeria	..	..	1
Egypt	..	4	1
Other Portuguese Africa	..	1	3
Totals	386	517	377

*Because of regulations imposed by war conditions the complete 1941 calendar year exports by countries of destination are not available.

United States Coarse Grain Exports in 1941†

Exports of barley, corn, oats and rye from the United States from Jan. 1 to March 31, 1941,* as compiled from the monthly reports of the United States Department of Commerce, in bushels (000's omitted):

BARLEY

To—	Jan.	Feb.	Mch.
Brazil	..	12	..
Mexico	24	26	10
Portugal	..	..	55
Others	1	..	..
Totals	25	38	65

CORN

Canada	78	7	23
United Kingdom	676	531	..
Others	1	1	1
Totals	755	539	24

OATS

Dominican Republic	1	..	..
Finland	..	21	..
Mexico	4	2	3
Costa Rica	1	1	1
Panama Canal Zone	1	..	1
Philippine Islands	3	..	..
Honduras	..	3	4
Others	..	1	..
Totals	10	28	9

RYE

Mexico	*..	*..	*..
Totals	*..	*..	*..

*Less than 500 bus. †Because of regulations imposed by war conditions the complete 1941 calendar year exports by countries of destination are not available.

United States Average Export Prices

Monthly average export prices of wheat flour, wheat and corn shipped from the United States, as reported by the Department of Commerce:

1941—	Flour, bbls	Wheat, bu	Corn, bu
December	$...	$...	$...
November	...	...	...
October	...	...	...
September	4.01	.77	.90
August	4.49	1.02	.84
July	3.98	.85	.84
June	4.48	.85	.81
May	4.04	.85	.88
April	3.87	.81	1.15
March	3.94	.77	1.20
February	3.97	.88	.77
January	3.87	.75	.77

Yearly average export values of wheat flour, wheat and corn, by calendar years:

	Flour, bbl	Wheat, bu	Corn, bu
1941*	$4.08	$ .81	$ .85
1940	3.70	.78	.67
1939	3.17	.58	.62
1938	4.44	.90	.64
1937	5.66	1.11	.67
1936	4.63	.98	1.05
1935	4.23	.91	1.50
1934	4.05	.65	.76
1933	3.49	.53	.49
1932	4.14	.60	.36
1931	3.56	.62	.69
1930	5.31	1.00	.94
1929	5.90	1.24	1.01
1928	6.18	1.29	1.02
1927	6.65	1.42	.85
1926	7.02	1.46	.86
1925	7.65	1.72	1.12

*Jan.-Sept. Because of regulations imposed by war conditions the complete 1941 calendar year figures are not available.

United States Wheat Exports in 1941*

Exports of wheat from the United States from Jan. 1 to March 31, 1941, by countries of destination, as officially reported by the United States Department of Commerce, in bushels (000's omitted):

To—	Jan.	Feb.	Mch.
Colombia	..	1	..
Cuba	1	1	3
Dominican Republic	..	4	5
Honduras	..	5	10
Japan	..	..	961
Mexico	..	31	614
Salvador	..	13	3
United Kingdom	45	..	402
Others	..	1	..
Totals	46	56	1,998

*Because of regulations imposed by war conditions the complete 1941 calendar year exports by countries of destination are not available.

Exports of Flour From U. S. Wheat

United States exports of wheat flour, made wholly of United States wheat, as reported by the Department of Commerce, in barrels:

Destination—	1939	1940	1941†
Norway	*.....	73,792	.....
Venezuela	*.....	43,869	11,972
Netherlands	744,802	151,446	.....
U. Kingdom	65,552	34,833	.....
Canada	65,742	70,222	5,778
Guatemala	95,654	68,932	18,857
Nicaragua	55,693	54,157	16,902
Republic of Panama	45,231	41,301	10,067
Salvador	20,619	17,498	7,188
Mexico	7,142	11,954	6,655
Cuba	519,851	482,324	221,764
Fr. W. Indies	41,324	82,243	48,322
Ecuador	175,960	69,965	29,185
Hongkong	391,038	203,266	51,657
Philippine Is.	1,060,018	895,569	203,692
Brazil	*.....	21,096	9,819
Newfoundland & Labrador	*.....	9,603	.....
Dominican Republic	*.....	6,434	2,141
Haiti	*.....	27,277	8,841
Other countries	2,442,664	1,680,758	261,478
Totals	5,731,290	4,046,539	914,318
Tot. value	$16,954,388	$12,797,411	$3,500,798

Jan.-Sept., 1941: 3,538,820 bbls; value $14,343,317.

*Included under other countries in previous years.

†Jan.-March. Because of regulations imposed by war conditions the complete 1941 calendar year exports to countries of destination are not available.

United States Feed Exports in 1941*

Exports of feedingstuffs from the United States in January, February and March, 1941, as compiled from the monthly reports of the United States Department of Commerce:

PREPARED MIXED FEEDS (TONS)

To—	Jan.	Feb.	Mch.
Bermuda	..	31	28
Other B. W. Indies	103	45	79
British Malaya	..	25	25
Canada	374	195	182
Cuba	6	2	20
Netherlands W. I.	35	70	60
Argentina	2	..	..
Guatemala	..	5	4
Honduras	..	61	62
Mexico	5	24	7
Colombia	1	6	7
Iceland	..	..	6
Newfoundland and Labrador	..	26	20
Republic of Panama	35	43	42
Panama Canal Zone	63	250	111
Philippine Islands	42	26	14
Salvador	..	..	2
United Kingdom	981	274	..
Venezuela	96	70	88
Totals	1,746	1,188	781

COTTONSEED OIL CAKE AND OIL MEAL (TONS)

Mexico	..	..	2
Canada	80	46	2
Honduras	1	1	1
Others	..	1	..
Totals	81	48	5

LINSEED OIL CAKE AND OIL MEAL (TONS)

Ireland	607	..	..
Canada	10	..	..
Mexico	..	15	..
Newfoundland and Labrador	30	..	..
Cuba	27	..	..
Others	1	..	1
Totals	675	15	1

*Because of regulations imposed by war conditions the complete calendar year exports by countries of destination are not available.

UNITED STATES WHEAT FLOUR EXPORTS

Exports of wheat flour from the United States, with countries of destination, by calendar years, as officially reported by the United States Department of Commerce, in barrels of 196 lbs (000's omitted):

To—	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931
Austria	..	..	..	..	..	..	..	13	9	60
Azores and Madeira Islds	9	1	4	6	6	1	1	3	2	12
Barbados	3	7	6	4	..	..	..	1	1	12
Belgian Congo	22	19	16	12	11	10	13	6	8	7
Belgium	1	15	10	8	5	5	4	7	9	26
Bermuda	3	4	1	1	1	..	3	..	..	2
Bolivia	4	6	11	20	2	..	2	2	3	37
Brazil	71	45	38	69	69	70	161	167	33	340
British East Africa	..	..	..	..	..	..	..	..	..	1
British Guiana	1	2	34	2	..	1	..	..	1	5
British Honduras	17	25	16	9	1	1	..	2	6	21
British Malaya	3	..	..	..	..	..	..	2	..	10
British South Africa	3	1	1	1	3	..	10	..	1	3
British West Africa	59	109	78	93	85	68	54	100	90	133
British West Indies*	..	7	5	6	8	1	3	6	19	10
Bulgaria	..	..	..	..	..	..	..	..	1	..
Canada	72	75	80	55	15	4	5	6	5	56
Canary Islands	4	..	..	2	6	2	8	6	11	26
Chile	..	6	4	1	1	..	..	8	12	1
China	1,499	1,347	225	18	6	8	350	41	1,098	1,142
Colombia	12	16	9	8	5	5	4	3	14	52
Costa Rica	109	115	107	100	92	78	100	86	92	125
Cuba	1,015	1,045	989	1,053	1,023	1,009	885	746	779	924
Denmark	..	3	3	2	10	11	32	43	95	396
Dominican Republic	50	53	47	45	50	54	53	64	70	75
Dutch East Indies*	1	2	1	1	1	1	1	1	2	5
Dutch Guiana	..	..	..	24	23	23	21	25	28	33
Dutch West Indies	40	64	54	45	43	41	36	36	44	47
Ecuador	90	189	104	104	67	26	39	36	66	101
Egypt	15	54	122	158	159	159	135	129	140	180
Finland	..	3	13	18	6	10	14	21	41	183
France	..	13	12	11	12	6	7	1	4	5
French Africa*	7	15	44	49	64	50	45	35	30	40
French Guiana	11	..	4	8	9	9	4	1	1	2
French Indo-China	..	..	..	..	..	..	..	1	1	2
French Oceania	..	..	..	..	..	..	..	..	..	6
French West Indies	110	65	130	118	105	106	143	141	140	123
Germany	..	1	4	17	17	19	18	23	58	173
Gibraltar	..	1	2	3	1	..	..	..	..	..
Greece	8	25	33	11	11	18	10	3	3	7
Guatemala	88	109	103	104	72	99	130	120	118	157
Haiti	76	91	82	102	129	108	123	123	179	255
Honduras	14	21	19	13	20	28	31	30	32	55
Hongkong	203	391	229	205	32	69	182	298	479	754
Iceland and Faroe Islds.	24	8	5	..	1	2	2	..	1	1
Ireland	..	1	1	..	..	5	47	59	90	168
Italy	..	1	12	..	..	4	8	82	52	56
Jamaica	4	21	33	11	2	3	2	3	8	32
Japan	..	190	1	7	2	5	4	1	5	49
Java and Madura	..	..	..	..	..	..	..	..	..	2
Kwangtung	..	275	..	14	1	..	28	34	44	138
Liberia	1	1	1	2	1	1	..	1	1	1
Malta, Gozo, etc.	..	1	10	3	1	7	22	24	18	35
Mexico	12	7	5	21	7	16	15	3	6	15
Miquelon and St. Pierre	1	2	2	2	1	2	2	3	2	1
Morocco	3	..	7	8	..	..	..	..	..	1
Mozambique	1	2	2	2	3	3	2	2	5	7
Netherlands	183	902	476	466	316	101	81	112	145	558
Newfoundland and Labrador	89	117	120	107	124	110	96	63	127	77
New Zealand	..	..	..	..	22	37	30	27	32	13
Nicaragua	57	56	31	40	37	51	59	56	50	87
Nigeria	11	25	26	28	34	31	25	..	..	..
Norway	166	289	133	131	101	103	146	131	186	323
Palestine	17	109	58	41	26	31	19	19	2	16
Panama, Republic of	108	101	91	125	131	124	119	122	117	127
Panama Canal Zone	48	44	37	..	..	..	..	..	..	..
Peru	18	20	20	15	16	16	26	11	31	62
Philippine Islands	896	1,060	879	527	363	248	486	507	574	678
Portugal	5	3	3	3	4	3	2	1	1	3
Portuguese Africa*	4	7	7	7	6	6	7	5	10	14
Russia in Asia	..	..	..	..	..	..	..	..	..	1
Salvador	25	27	25	29	21	27	53	78	83	118
Spain	..	9	57	1	..	..	..	1	..	..
Spanish Africa*	..	..	..	..	2	2	3	2	..	7
Surinam	26	36	..	..	..	..	..	..	..	..
Sweden	..	4	5	2	2	2	4	3	6	16
Syria	..	2	..	..	..	..	..	..	1	3
Trinidad and Tobago	2	6	21	4	5	2	2	2	3	8
Turkey	..	..	..	..	..	..	..	..	..	2
United Kingdom	37	67	201	97	43	53	66	69	239	1,151
Venezuela	418	400	317	253	211	191	185	189	208	259
Virgin Islands	..	..	..	..	..	..	8	16	19	21
Other countries	..	9	8	1	6	11	88	1	4	..
Totals	5,775	7,747	5,214	4,453	3,659	3,297	4,163	3,963	5,795	9,654

*Not elsewhere specified.

UNITED STATES OATS EXPORTS

Exports of oats from the United States, with principal countries of destination, by calendar years, as officially reported by the United States Department of Commerce, in bushels of 32 lbs (000's omitted):

To—	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931
Belgium	..	..	..	..	..	310	..	..	82	..
British West Indies	2	4	24	6	..	2	..	1	3	6
Canada	1	2	7,957	6,456	361	1	2	1,238	2,267	1,718
Cuba	1	105	302	118	34	62	3	85	349	183
Dominican Republic	4	4	4	4	3	4	2	2	2	4
Ecuador	..	..	..	..	..	..	..	..	1	..
Finland	86	..	..	..	..	..	..	..	..	..
Honduras	9	24	16	8	10	6	52	58	66	81
Italy	..	..	..	..	72	57	..	..	..	..
Mexico	35	25	144	21	3	62	22	29	22	42
Netherlands	..	..	..	..	..	28	..	..	595	..
Newfoundland and Labrador	..	..	9	..	..	..	..	..	10	..
Nicaragua	..	..	..	..	..	2	5	5	13	8
Panama	4	6	7	9	18	11	32	40	16	21
Philippine Islands	29	28	29	..	2	3	1	1	..	44
Sweden	..	..	17	..	..	..	..	..	..	..
United Kingdom	..	..	..	60	..	..	..	..	45	..
Ireland	..	..	..	..	..	..	..	..	..	2
Venezuela	6	21	3	..	3	12	11	8	..	..
Other countries	9	7	5	46	11	8	11	8	15	11
Totals	186	226	8,517	6,728	517	568	141	1,475	3,486	2,121

United States Calendar Year Exports

Exports of wheat, flour and coarse grains, by calendar years, as reported by the United States Bureau of Foreign and Domestic Commerce:

WHEAT AND FLOUR EXPORTS

	Flour, bbls	Wheat, bus
1941*	9,436,000	4,687,000
1940	5,775,000	14,379,000
1939	7,747,000	63,214,000
1938	5,212,788	86,980,945
1937	4,452,708	34,845,437
1936	3,659,586	1,879,238
1935	3,297,431	232,965
1934	4,163,325	16,968,589
1933	3,963,615	7,983,339
1932	5,795,462	54,879,484
1931	9,654,234	80,311,041
1930	13,059,618	87,773,601
1929	13,663,457	90,129,600
1928	11,852,000	96,290,000
1927	12,826,000	168,307,000
1926	11,850,000	138,164,000
1925	11,119,058	86,525,940
1924	15,990,000	166,302,000
1923	16,309,856	98,524,405
1922	15,124,628	164,691,565
1921	16,800,805	280,057,601
1920	19,853,952	218,287,000
1919	26,449,581	148,086,470
1918	21,706,700	111,177,103
1917	13,926,117	106,196,318
1916	14,379,000	154,049,686
1915	15,662,000	205,906,000
1914	12,769,073	173,861,944
1913	12,278,206	99,508,968
1912	10,622,000	61,655,000
1911	11,258,000	32,669,000
1910	8,370,000	24,257,000

COARSE GRAIN EXPORTS

(In bus, 000's omitted)

	Corn	Oats	Rye	Barley
1941*..	8,065	270	11	786
1940...	38,317	186	890	1,403
1939...	32,117	226	84	5,410
1938...	147,505	8,517	3,347	16,130
1937...	5,834	6,728	4,262	11,473
1936...	524	517	6	7,377
1935...	177	563	5	7,507
1934...	2,987	141	6	5,447
1933...	5,365	1,476	40	7,142
1932...	7,886	3,486	1,096	7,043
1931...	2,700	2,121	121	7,851
1930...	6,369	1,501	266	9,874
1929...	33,745	6,609	3,434	29,523
1928...	25,799	10,421	14,499	51,676
1927...	13,428	10,053	35,941	37,973
1926...	23,064	11,395	11,941	13,569
1925...	12,762	29,443	28,675	29,089
1924...	18,336	3,983	85,666	20,179
1923...	42,188	3,227	30,850	11,983
1922...	163,609	80,011	47,260	18,781
1921...	128,975	3,224	29,812	25,834
1920...	17,761	12,878	57,070	17,854
1919...	11,193	55,295	32,898	37,612
1918...	39,899	114,463	7,632	18,805
1917...	52,170	98,689	13,412	17,859
1916...	63,548	101,411	15,161	22,486
1915...	48,264	104,573	13,156	26,529
1914...	15,626	35,067	7,847	18,208
1913...	45,287	5,375	1,995	12,782
1912...	30,980	30,374	474	8,195
1911...	61,573	2,126	5	3,555
1910...	42,693	1,931	19	8,263

*January-September. Because of regulations imposed by war conditions the complete 1941 calendar year exports are not available.

United States Millfeed Imports

Imports of bran, shorts and other wheat by-product feeds, including feeds ground in the United States from bonded wheat, as reported by the United States Department of Commerce, in tons:

1941—	Withdrawn from bond	Direct importations	Total
January	5,641	33,079	38,720
February	5,661	31,780	37,441
March	7,525	24,095	31,620
April	4,872	24,994	29,866
May	5,161	42,822	47,983
June	2,949	51,484	54,433
July	5,571	39,671	45,242
August	8,336	27,624	35,960
September	9,118	8,632	17,750
October	....	.....	.....
November	....	.....	.....
December	....	.....	.....
Totals*	54,834	284,181	339,015
Previous years—			
1940	82,678	403,233	485,911
1939	117,662	341,295	458,957
1938	30,568	27,826	58,394
1937	131,320	170,257	301,571
1936	103,307	270,274	373,581
1935	82,102	256,558	338,660
1934	61,770	133,516	195,286
1933	66,221	113,706	179,927
1932	59,497	20,240	79,737
1931	115,679	126,728	242,407
1930	133,994	253,315	387,309
1929	128,987	143,876	272,863
1928	133,727	138,917	272,644

*Jan.-Sept. Because of regulations imposed by war conditions the complete 1941 calendar year imports are not available.

United States Grain Products Exports

Exports of miscellaneous grain products in the calendar years, as reported by the Department of Commerce:

	1940	1941*
Barley malt, bus	1,315,688	1,449,808
Hominy and grits, lbs	12,548,770	10,328,725
Oatmeal and rolled oats, lbs	17,419,867	17,398,335
Rice flour, meal and broken rice, milled rice, including brown rice, lbs	329,772,294	283,735,054
Biscuit and crackers	4,837,540	3,655,506
Macaroni, etc., lbs	3,589,978	2,581,372
Cereal breakfast foods, lbs	9,111,066	4,390,789

*Jan.-Sept. Because of regulations imposed by war conditions the complete 1941 calendar year exports are not available.

UNITED STATES FLOUR EXPORTS BY CUSTOMS DISTRICTS

Exports of wheat flour from the United States, by customs districts, as reported by the Department of Commerce, in barrels (000's omitted):

	Fiscal years				Calendar years					
From—	1937-38	1938-39	1939-40	1940-41*	1936	1937	1938	1939	1940	1941†
Massachusetts	8	2	1	2	1	8	6	3	3	..
Buffalo	103	203	161	65	144	99	162	236	85	....
New York	2,231	2,339	2,423	1,376	2,647	2,425	2,199	2,415	2,004	517
Philadelphia	14	..	3	..	1	6	9	1	1	..
Maryland	61	28	52	43	11	27	56	64	2	41
Virginia	26	23	15	2	11	11	34	21	1	2
Florida	3	6	4	4	5	3	6	3	3	..
Mobile	16	19	13	8	3	10	14	20	12	1
New Orleans	542	602	782	407	147	365	608	793	487	199
Sabine	40	14	24	9	2	32	15	27	18	1
Galveston	395	371	435	101	92	286	342	517	196	41
El Paso	6	5	5	15	..	2	4	5	13	6
Los Angeles	..	..	2	2	2	1	..	1	..	2
San Francisco	103	70	76	39	70	90	75	62	64	22
Oregon	320	1,396	1,050	988	121	203	556	1,753	1,207	140
Washington	1,135	1,577	1,469	1,298	387	848	1,111	1,819	1,674	309
Montana, Idaho	6	2	1	..	..	3	5	1	..	..
Michigan	13	1	1	..	1	6	6	1	..	..
Porto Rico	8	..	..	..	7	6	3	..	..	..
San Diego	10	..	..	..	7	18	..	..	..	..
Virgin Islands	..	..	2	..	..	1	2	3	..	..
Totals	4,990	6,637	6,519	4,360*	3,660	4,453	5,213	7,747	5,775	†1,281

*July-March. †Jan.-March. Because of regulations imposed by war conditions the complete 1940-41 crop year and 1941 calendar year exports by customs districts are not available.

UNITED STATES WHEAT EXPORTS BY CUSTOMS DISTRICTS

Exports of wheat from the United States, by customs districts, as reported by the Department of Commerce, in bushels (000's omitted). (Due to unspecified revisions in districts, the sum of the districts as given does not always agree with the total):

	Fiscal years				Calendar years					
From—	1937-38	1938-39	1939-40	1940-41*	1936	1937	1938	1939	1940	1941†
Massachusetts	..	..	..	45	..	..	..	..	..	45
Buffalo	2,316	1,539	350	..	..	164	2,319	1,722	..	..
New York	3,671	2,100	2,369	557	15	1,703	2,829	2,138	1,644	403
Philadelphia	990	1,150	..	175	..	516	746	879	175	..
Maryland	371	1,419	220	..	2	101	625	1,124	159	..
Mobile	326	..	..	..	21	41	206	..	..	..
New Orleans	2,776	6,426	2,965	123	53	1,123	6,151	4,493	551	59
Sabine	4,534	..	273	..	..	577	3,958	273	..	..
Galveston	39,799	38,110	4,891	50	21	16,818	44,837	21,891	1,657	5
San Antonio	2,468	1,217	..	..	..	871	1,778	1,035	..	..
El Paso	1	..	..	1	28	1	19	..	..	..
Arizona	18	1	..	..	..	..	..	..	1	..
San Francisco	201	88	15	18	35	181	80	42	23	10
Los Angeles	1	..	..	..	..	1	..	..	..	..
Oregon	13,876	25,003	8,413	3,915	1,510	6,074	16,491	21,824	7,140	961
Wisconsin	115	..	..	1	..	115	..	..	..	..
Washington	1,986	4,603	2,360	2,124	173	1,361	2,070	5,146	2,597	12
Montana, Idaho	580	20	..	..	1	28	591	..	..	..
Dakota	335	..	..	..	14	..	334	..	..	..
Duluth-Sup.	1,662	813	372	382	..	834	1,144	868	382	..
Michigan	30	12	..	..	3	13	21	7	..	..
Chicago	5,198	1,735	1,398	..	..	4,267	2,449	1,748	..	..
San Diego	117	93	9	93	3	58	146	18	49	44
Laredo	..	..	..	561	..	..	..	..	..	561
Florida	5	2	..	..	..	1	7	..	..	..
Porto Rico	..	7	1	1	..	..	2	6	1	..
Totals	83,740	84,539	23,636	8,045*	1,879	34,848	86,902	63,214	14,379	†2,100

*July-March. †Jan.-March. Because of regulations imposed by war conditions the complete 1940-41 crop year and 1941 calendar year exports by customs districts are not available.

UNITED STATES RYE EXPORTS

Exports of rye from the United States, with principal countries of destination, by calendar years, as officially reported by the United States Department of Commerce, in bushels of 56 lbs (000's omitted):

To—	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931
Belgium	..	..	326	545	..	..	..	..	..	41
Canada	2	1	1,301	2,466	5	*.	1	39	315	..
Cuba	..	..	..	..	..	*.	..	1	..	5
Denmark	81	81	421	514	..	..	..	..	42	47
Finland	228	..	..	..	..	..	..	..	..	..
Germany	..	..	41	189	..	..	..	..	290	..
Iceland	10	4	..	..	..	..	..	..	..	..
Mexico	1	..	2	5	..	5	5	..	4	7
Netherlands	..	..	115	251	..	..	..	..	445	21
Norway	..	..	1,086	147	..	..	..	..	..	..
Sweden	325	..	13	..	..	..	..	..	..	..
Switzerland	..	..	..	24	..	..	..	..	..	..
United Kingdom	239	..	40	90	..	..	..	..	..	..
All others	3	..	2	31	..	..	..	..	..	..
Totals	890	86	3,347	4,262	5	5	6	40	1,096	121

*Less than 500 bus.

UNITED STATES CORN EXPORTS

Exports of corn from the United States, with principal countries of destination, by calendar years, as officially reported by the United States Department of Commerce, in bushels of 56 lbs (000's omitted):

To—	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931
Azores and Madeira Isl.	..	282	..	..	..	..	..	..	..	..
Belgium	86	185	4,862	228	1	43	8	3	547	2
Bermuda	5	10	..	..	..	..	..	..	..	..
Brazil	1	..	269	..	..	..	..	..	..	..
British East Africa	..	296	..	..	..	..	..	..	..	..
British Honduras	..	1	5	..	1	..	..	..	..	..
Canada	14,725	8,879	64,195	1,723	402	77	2,620	3,683	5,592	1,932
Costa Rica	..	149	..	..	..	..	1	..	3	2
Cuba	1	1	1	..	1	..	1	105	1	5
Denmark	2,656	799	2,621	161	..	..	..	..	197	..
Egypt	..	..	100	..	..	..	..	..	..	..
Finland	..	..	234	..	..	..	..	..	..	..
France	..	152	309	12	36	11	54	29	174	18
Germany	..	..	13,897	171	..	..	57	13	256	68
Guatemala	..	..	..	14	..	..	1	..	..	..
Honduras	..	..	..	..	4	4	8	4	3	17
Ireland	1,777	2,584	11,520	334	..	..	..	69	..	..
Italy	..	..	86	..	..	..	..	..	..	..
Jamaica	49	..	..	..	6	11	29	38	27	52
Jugoslavia	..	..	65	..	..	..	..	..	..	..
Mexico	..	2,141	991	28	..	1	7	..	5	509
Netherlands	3,090	6,373	15,449	2,613	1	2	141	500	338	50
Newfoundland and Labrador	..	2	..	..	..	..	..	1	..	..
Nicaragua	..	..	..	..	..	1	1	4	7	6
Norway	422	94	810	..	..	..	..	..	..	..
Panama Canal Zone	..	244	..	..	1	2	1	3	2	7
Poland and Danzig	..	14	13	6	55	9	10	17	3	3
Portugal	..	..	283	..	..	..	..	..	..	..
Salvador	..	..	..	..	..	1	..	..	..	..
Spain	..	..	..	..	..	..	..	..	1	..
Sweden	..	143	1,406	..	1	..	..	..	..	..
United Kingdom	15,484	9,604	30,361	538	13	12	29	855	704	9
Union of South Africa	..	31	..	..	..	..	..	..	..	..
Venezuela	1	122	..	..	..	..	..	..	..	..
West Indies*	1	1	18	..	1	2	8	20	13	14
Other countries	19	10	10	10	1	2	28	21	13	5
Totals	38,317	32,117	147,505	5,833	524	177	2,987	5,365	7,886	2,700

*Not elsewhere specified.

United States Calendar Year Imports

Imports of wheat flour, wheat and other grain and grain products into the United States by calendar years, as reported by the Department of Commerce (000's omitted):

	Wheat flour, bbls	Wheat, bus—Milled in bond, Domestic consumption	Wheat, bus—Milled in bond, for export—To Cuba	Wheat, bus—Milled in bond, for export—To all others
1941*	3	5,430	1,163	5,263
1940	75	379	2,457	6,197
1939	88	394	2,598	7,756
1938	73	48	839	2,942
1937	25	8,684	3,281	5,751
1936	500	34,170	4,095	9,216
1935	13	27,439	3,913	7,518
1934	1	7,736	3,446	7,360
1933	1	31	2,733	7,554
1932	..	3	2,592	7,431
1931	..	43	*..	15,648
1930	2	21	*..	19,968
1929	2	30	*..	14,546
1928	6	199	*..	18,649
1927	5	6	*..	11,747

*Included in all others.

	Bbls—Rye flour	Bushels—Rye	Corn	Barley	Oats	Flaxseed
1941*..	..	8,785	606	165	5,902	11,362
1940...	..	60	1,621	1,406	12,154	11,825
1939...	..	†..	490	776	4,293	16,028
1938...	..	..	404	126	7	...
1937...	..	207	86,337	10,384	58	...
1936...	1	3,889	31,471	8,144	149	...
1935...	..	9,643	43,242	4,840	10,107	17,560
1934...	5	7,622	2,959	6,580	5,580	14,170
1933...	11	8,006	160	†..	132	13,825
1932...	..	...	344	†..	59	7,919
1931...	..	81	618	†..	576	14,480
1930...	..	7	1,556	†..	183	12,622
1929...	..	..	407	†..	112	24,243
1928...	..	2	565	†..	489	17,579
1927...	..	..	5,458	†..	85	21,821

*Jan.-Sept. Because of regulations imposed by war conditions, the complete 1941 calendar year imports are not available.

†Too small to be reported separately by Department of Commerce.

United States Flour and Wheat Imports

Imports of wheat flour and wheat into the United States, as reported by the Bureau of Foreign and Domestic Commerce:

Crop years—	Flour, bbls	Wheat, bus
1940-41	62,000	10,732,000
1939-40	71,000	10,094,000
1938-39	83,000	9,235,000
1937-38	30,000	3,421,000
1936-37	41,000	47,731,000
1935-36	35,000	46,472,000
1934-35	4,000	*25,116,000
1933-34	825	†11,490,437
1932-33	632	9,379,000
1931-32	271	12,884,908
1930-31	1,193	19,053,000
1929-30	1,704	12,948,000
1928-29	2,603	21,429,774
1927-28	5,729	15,706,784
1926-27	6,056	13,235,260
1925-26	17,405	15,597,187
1924-25	6,718	6,169,193
1923-24	169,133	27,283,905
1922-23	429,420	18,012,540
1921-22	619,105	14,405,269
1920-21	1,420,884	51,004,024

*Including 14,052,000 bus for domestic consumption, of which 8,146,000 was for feed. †Including 149,000 bus for domestic consumption, of which 6,000 was for feed.

United States Bread and Biscuit Imports

Imports for consumption of yeast-leavened bread by calendar years, as reported by the U. S. Department of Commerce:

	Lbs	Value
1941†	21,121	$4,058
1940	733,493	96,989
1939	2,307,536	250,811
1938	2,270,364	266,321
1937	5,705,476	425,674
1936	4,833,899	356,670
1935	3,526,498	286,810
1934	2,639,824	244,991
1933	2,499,922	219,471
1932	2,735,463	252,139
1931	2,761,777	352,888
1930	2,677,227	389,492
1929	2,467,881	378,044

Imports of biscuit, wafers, cakes, etc., by calendar years:

	Lbs	Value
1941†	*.....	$74,764
1940	*.....	189,818
1939	*.....	286,375
1938	*.....	310,828
1937	*.....	378,942
1936	*.....	281,712
1935	*.....	282,475
1934	*.....	285,015
1933	*.....	259,521
1932	*.....	260,183
1931	*.....	470,791
1930	*.....	687,253
1929	*.....	623,387

*Quantity not reported after 1928. †Jan.-Sept. Because of regulations imposed by war conditions the complete 1941 calendar year imports are not available.

United States Crop Year Grain Imports

Imports of corn, oats and macaroni by crop years ended June 30, as reported by the United States Bureau of Foreign and Domestic Commerce:

	Bus, 000's omitted—Corn	Bus, 000's omitted—Oats	Macaroni, lbs
1941	1,718	10,213	666,645
1940	562	10,542	1,108,965
1939	397	1,009	1,109,645
1938	34,440	11	1,329,737
1937	77,974	156	1,587,000
1936	31,284	98	1,368,000
1935	20,427	15,614	1,359,590
1934	254	142	1,451,507
1933	195	15	1,956,000
1932	386	65	2,624,000
1931	1,747	628	2,525,000
1930	482	152	2,780,000
1929	490	398	3,024,000

UNITED STATES WHEAT EXPORTS

Exports of wheat from the United States, with countries of destination, as officially reported by the U. S. Department of Commerce, by calendar years, in bushels (000's omitted):

To—	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931
Algeria	..	..	..	..	..	..	..	..	19	320
Argentina	..	..	..	..	..	..	..	..	291	..
Australia	..	..	..	..	..	..	..	..	..	158
Azores and Madeira Isl.	..	..	24	..	..	..	..	..	..	..
Belgium	1,499	12,905	12,454	6,172	30	77	157	926	5,258	10,322
Bolivia	..	..	..	394	..	..	6	17	19	71
Brazil	..	..	..	356	..	..	..	1,291	17,020	5,408
British South Africa	..	..	..	..	..	..	..	..	..	58
British West Indies	..	..	..	..	..	..	..	..	19	..
Canada	715	2,262	5,966	5,605	54	14	5	22	1,151	11,135
Chile	..	..	..	33	..	..	..	..	..	9
China	1,525	5,334	619	..	..	..	7,155	3,570	2,585	12,202
Colombia	51	354	362	57	..	..	2	..	29	95
Costa Rica	..	..	..	1	..	..	..	..	..	..
Cuba	24	72	56	16	9	5	19	26	31	26
Denmark	..	..	1,815	144	..	..	19	..	24	48
Dominican Republic	22	26	35	10	..	..	..	..	1	1
Finland	..	..	28	19	..	..	..	..	99	19
France	40	365	867	589	67	..	96	154	4,645	5,959
French Oceania	..	..	..	..	..	..	..	..	..	40
Germany	..	378	3,214	669	..	11	19	..	1,743	2,821
Greece	..	70	2,153	623	..	..	..	274	9,528	4,496
Guatemala	..	..	1	..	..	1	7	2	34	3
Honduras	108	194	167	45	33	36	38	109	110	99
Hongkong	3	10	12	2	..	3	6	14	13	13
Ireland	1,189	3,843	11,159	3,395	399	..	2,696	500	934	1,152
Italy	123	70	1,394	450	204	..	119	126	978	1,707
Italian Africa	..	..	..	..	..	..	..	..	19	..
Japan	..	..	..	42	133	..	4,401	664	218	1,820
Malta, Gozo, etc.	..	..	77	58	..	..	..	..	..	..
Mexico	94	1,970	2,894	996	31	4	8	45	19	266
Morocco	..	..	..	..	..	..	..	..	..	11
Netherlands	914	7,853	15,500	7,187	336	3	37	80	4,260	5,950
Newfoundland and Labrador	..	..	..	..	..	..	..	2	..	..
New Zealand	..	..	..	..	..	..	..	..	..	2
Nicaragua	..	..	..	3	17	..	..	..	..	..
Norway	699	278	671	149	..	..	..	..	..	53
Palestine and Syria	..	83	45	22	..	..	..	..	..	..
Panama	..	1	1	1	252	..	586	..	..	1,386
Peru	..	..	55	587	..	..	108	75	2	191
Portugal	56	..	1,818	..	..	..	..	..	..	284
U. S. S. R.	3,621	3,606	..	1	10	..	..	..	..	..
Salvador	68	269	210	182	107	78	196	17	..	100
Spain	..	305	170	351	..	..	..	..	327	..
Sweden	..	..	51	..	..	..	..	..	40	88
Switzerland	548	34	131	111	..	..	..	..	..	..
Union of S. Africa	..	46	..	..	..	..	..	..	..	..
United Kingdom	3,064	22,876	24,892	6,562	197	..	1,289	67	5,460	13,996
All others	16	10	61	16	..	1	15	2	3	1
Totals	14,379	63,214	86,902	34,848	1,879	233	16,970	7,983	54,879	80,311

UNITED STATES CROP YEAR EXPORTS

Exports of wheat, flour and coarse grains, by crop years, as reported by the United States Bureau of Foreign and Domestic Commerce:

WHEAT AND FLOUR EXPORTS

Years ending June 30—	Wheat, bus	Flour, bbls
1941	10,810,000	6,353,000
1940	23,636,000	6,519,000
1939	84,539,000	6,637,000
1938	33,740,000	4,990,000
1937	3,168,000	3,919,000
1936	311,000	3,323,000
1935	3,019,000	3,939,000
1934	18,799,000	3,873,000
1933	20,887,000	4,327,088
1932	96,521,000	5,357,000
1931	76,365,000	11,757,000
1930	92,175,000	12,994,000
1929	103,113,651	12,888,042
1928	145,998,768	12,821,243
1927	156,249,930	13,385,025
1926	63,188,602	9,541,800
1925	195,490,207	13,896,343
1924	78,798,034	17,252,620
1923	154,950,971	14,882,714
1922	208,321,091	15,796,824
1921	293,267,637	16,179,956
1920	122,430,724	21,651,961
1919	178,582,673	24,181,979
1918	34,118,853	21,879,951

COARSE GRAIN EXPORTS (In bus, 000's omitted)

Years ending June 30—	Barley	Corn	Oats	Rye
1941	638	21,564	159	245
1940	3,844	34,913	204	732
1939	11,215	66,568	4,005	784
1938	17,614	103,269	11,361	6,578
1937	5,153	246	67	248
1936	9,886	372	741	9
1935	4,050	1,937	377	...
1934	5,935	4,405	451	21
1933	9,155	8,193	4,085	311
1932	5,084	3,344	2,479	352
1931	10,390	2,529	907	179
1930	21,545	9,354	4,635	2,538
1929	56,996	40,749	10,846	9,346
1928	36,581	18,390	6,034	26,046
1927	17,044	17,563	9,245	21,613
1926	27,182	23,137	30,975	12,505
1925	23,653	8,460	10,874	49,909
1924	11,209	21,186	1,149	17,705
1923	18,501	93,146	18,790	50,227
1922	22,400	176,410	16,767	29,904
1921	20,457	66,911	4,302	45,735
1920	26,571	14,468	33,945	37,463
1919	20,458	16,688	96,361	27,540
1918	26,285	40,997	105,837	11,990

UNITED STATES BARLEY EXPORTS

Exports of barley from the United States, with principal countries of destination, by calendar years, as officially reported by the United States Department of Commerce, in bushels of 48 lbs (000's omitted):

To—	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931
Belgium	163	153	1,280	626	98	270	104	359	1,556	375
Brazil*	40	..	..	..	..	..	..	..	..	..
British India	..	..	..	..	14	..	..	..	..	..
Czecho-Slovakia	..	..	60	..	10	..	..	..	..	..
Canada	..	204	5,668	2,527	60	..	11	106	444	5
China	2	..	..	..	..	..	11	8	..	15
Denmark	..	..	..	..	..	..	..	..	..	1
France	..	..	..	9	..	..	..	..	12	..
Germany	..	..	348	..	..	..	..	..	174	26
Hongkong	..	..	..	..	..	1	..	..	..	..
Ireland	327	173	374	..	334	635	..	140	..	160
Mexico	509	104	68	102	173	236	255	178	85	158
Netherlands	..	143	1,903	1,116	385	..	..	..	291	118
Norway	..	144	..	..	..	..	..	21	..	79
Sweden	..	..	..	..	6	5	..	..	..	..
United Kingdom	352	4,477	6,412	7,069	6,293	6,353	5,067	6,330	4,481	6,912
Venezuela	..	..	..	2	..	..	..	..	..	..
Other countries	10	12	17	21	4	7	..	..	..	2
Totals	1,403	5,410	16,130	11,470	7,377	7,507	5,447	7,142	7,042	7,851

*Included with other countries before 1940.

U. S. Export Subsidies on Wheat Flour

The United States government export indemnities on wheat flour, since the beginning of the AAA general export subsidy program effective Sept. 7, 1938, are announced (since Feb. 6, 1942) at 2 p.m. Eastern War Time, from the Department of Agriculture in Washington, D. C. The rates effective on April 1, 1942, in cents per barrel:

From Pacific ports to—	April 1
Philippine Islands	$0.90
Other countries	1.25
From other U. S. ports to foreign countries	1.25

For the complete table showing the rates from September, 1938, to April, 1941, refer to The Northwestern Miller Almanack of 1941, page 75.

London Grain Option Market

The London grain option market is suspended owing to the war, the British government being the sole buyer.

The following grades of wheat were formerly deliverable on the London wheat option contract: No. 3 northern Manitoba (Dominion inspection); No. 2 hard winter (official sample); 62½ lbs Bahia Blanca, Barletta and/or Russo f.a.q; 63½ lbs Barletta and/or Russo, Buenos Aires or La Plata f.a.q; 62½ lbs Rosafe f.a.q; Karachi choice white f.a.q.

The following grades were formerly deliverable at a premium: No. 1 northern Manitoba, 2s premium; No. 2 northern Manitoba, 1s premium; Australian (official standard), 1s premium.

UNITED STATES WHEAT EXPORTS BY CLASSES

Exports of wheat from the United States by classes, in crop years, as reported by the Department of Agriculture, in thousand bushels. Distribution made on the basis of United States inspections for export by ports and inspections of United States wheat in the eastern division of Canada. Exports by classes prior to 1923 are not as accurate as for later years, due to the larger amounts of mixed wheat:

Year—	Hard red spring	Durum	Hard red winter	Soft red winter	White	Total
1940-41	1,000	....	6,000	3,000	24,000	34,000
1939-40	5,000	....	23,000	2,000	19,000	49,000
1938-39	3,000	2,000	76,000	4,000	24,000	109,000
1937-38	2,000	....	62,500	4,000	15,200	83,700
1936-37	....	....	500	....	2,700	3,200
1935-36	....	....	100	....	200	300
1934-35	....	....	200	....	2,800	3,000
1933-34	....	....	1,400	....	17,400	18,800
1932-33	....	1,700	17,000	....	2,200	20,900
1931-32	100	4,700	75,500	2,200	14,000	96,500
1930-31	600	12,100	47,300	2,600	13,700	76,300
1929-30	1,900	14,800	54,400	2,700	18,400	92,200
1928-29	2,200	47,500	35,000	3,000	15,400	103,100
1927-28	6,000	36,500	60,300	12,800	30,400	146,000
1926-27	2,174	21,970	73,123	31,352	27,631	156,250
1925-26	4,958	26,834	9,677	2,563	19,157	63,189
1924-25	21,567	33,816	120,578	8,333	11,201	195,490
1923-24	2,068	18,836	26,984	10,464	20,441	78,793
1922-23	13,975	43,188	61,165	22,770	13,853	154,951
1921-22	25,613	25,645	99,651	29,274	28,138	208,321
1920-21	18,421	31,937	162,544	59,296	21,070	293,268

FIFTY-NINTH ANNUAL STATEMENT OF THE

Western Millers Mutual Fire Insurance Co.

KANSAS CITY, MISSOURI

December 31, 1941

ASSETS

Cash in Banks	$118,591.96
U. S. Government Bonds	142,350.00
State, County and Municipal Bonds	449,370.00
Canadian Bonds	13,740.00
Other Bonds	132,122.00
Stocks (Market Value)	113,950.00
Mortgages	None
Real Estate	None
Premiums in Transmission (less than 90 days due)	43,007.25
Reinsurance due	8,262.65
Accrued Interest and other assets	4,162.43
TOTAL CASH ASSETS	$1,025,556.29

LIABILITIES

Losses in Process of Adjustment (To provide for all losses incurred, but on which payment is not yet due.)		$74,816.33
Reserve for Unearned Premiums (The full "Legal Reserve" held for the protection of Policyholders.)		608,338.17
Reserve for Taxes and other expenses		27,000.00
Total Liabilities and Reserves		$710,154.50
Guaranty Fund	$35,100.00	
Net Cash Surplus	280,301.79	
Surplus to Policyholders		315,401.79
TOTAL		$1,025,556.29

OFFICERS

R. M. ROGERS.....President
PAUL M. MOHR.....Vice President
C. W. TRAPP.....Secretary
R. A. RIDGWAY.....Treasurer

DIRECTORS

ROBERT A. RIDGWAY.....Kansas City, Missouri
R. R. CLARK.....St. Joseph, Missouri
H. S. COWGILL.....Carthage, Missouri
R. W. MAGILL.....Wichita, Kansas
PAUL M. MOHR.....Kansas City, Missouri
C. C. KELLY.....Hutchinson, Kansas
J. C. LYSLE.....Leavenworth, Kansas
R. M. ROGERS.....Kansas City, Missouri
L. L. SEIBEL.....Kansas City, Missouri
GEORGE G. SOHLBERG.....Oklahoma City, Oklahoma
HOUSTON DUNN.....Philadelphia, Pennsylvania

DEPARTMENT MANAGERS

J. W. HUNTINGTON, Columbus, Ohio.....Ohio Department
GLEASON ALLEN, Minneapolis, Minn.....Northwestern Department
A. O. HODGES, Kansas City, Mo.....Southwestern Department
A. J. KELLENBERGER, Seattle, Wash.....Pacific Department
O. R. VAN DYKE, Nashville, Tenn.....Southeastern Department
L. C. FELTON, Louisville, Ky.....Mutual Insurance Agency

The Western Millers Mutual Fire Insurance Company writes the following classes of insurance on the participating plan:

FIRE, WINDSTORM, AUTOMOBILE, EXPLOSION, SPRINKLER LEAKAGE, RIOT AND CIVIL COMMOTION, INLAND MARINE, AIRCRAFT, EARTHQUAKE, SMUDGE, USE AND OCCUPANCY, RENTS

Losses Paid Since Organization	Savings to Policyholders Since Organization
$5,475,711.44	$5,902,625.68

UNITED STATES MONTHLY FLOUR AND WHEAT EXPORTS

Exports of wheat flour from the United States, reported by the United States Bureau of Foreign and Domestic Commerce, by months and calendar years, in barrels of 196 lbs (000's omitted). Due to unspecified revisions in monthly totals, the sum of the various months does not always agree exactly with the total given for the year:

	1941	1940	1939	1938	1937	1936	1935	1934	1933	1932
January	387	434	510	373	328	253	265	362	324	864
February	517	508	673	388	316	248	276	292	308	712
March	377	643	553	437	320	297	317	355	351	597
April	768	427	765	419	328	299	266	406	332	539
May	672	428	812	469	364	319	303	270	321	329
June	554	256	610	415	308	289	253	219	362	425
July	507	385	944	409	264	290	248	286	289	347
August	504	435	645	377	379	305	270	440	362	415
September	425	427	669	399	433	410	279	443	317	372
October	...	668	623	557	474	321	314	397	312	376
November	...	749	579	431	473	269	335	380	302	403
December	...	405	402	540	457	358	234	315	388	387
Totals	*4,687	5,775	7,747	5,213	4,453	3,658	3,360	4,163	3,964	5,795

Exports of wheat from the United States, by months and calendar years, as officially reported, in bushels of 60 lbs (000's omitted):

	1941	1940	1939	1938	1937	1936	1935	1934	1933	1932
January	46	608	10,217	8,521	33	13	14	2,867	1,793	4,074
February	56	1,430	8,782	8,643	38	28	4	2,667	729	4,650
March	1,998	3,704	8,487	8,510	61	30	10	3,065	456	5,749
April	1,246	1,833	5,874	6,551	137	16	30	3,576	194	9,354
May	1,414	227	10,672	11,043	395	34	2	1,456	14	7,283
June	106	632	3,929	7,059	770	26	8	887	16	6,088
July	30	1,888	2,977	10,844	2,145	26	66	826	29	3,208
August	769	934	5,903	9,900	5,453	222	8	1,776	21	3,899
September	3,771	990	2,530	3,482	2,678	487	14	109	43	2,479
October	...	1,283	1,701	3,104	7,104	926	14	57	24	2,656
November	...	549	1,452	4,893	6,388	21	30	152	513	3,714
December	...	301	597	4,430	7,175	50	34	32	5,052	1,728
Totals	*9,436	14,379	63,214	86,981	34,848	1,879	233	16,970	7,983	54,879

*Because of regulations imposed by war conditions the complete 1941 calendar year exports are not available.

UNITED STATES GRAIN IMPORTS

Imports into the United States, as compiled by the United States Department of Agriculture, by countries of origin, for years beginning July, 1932-40, in bushels (000's omitted):

Countries of origin—	1932-33	1933-34	1934-35	1935-36	1936-37	1937-38	1938-39	1939-40	1940-*1941
Rye, grain—									
Poland and Danzig	0	5,260	7,896	1,381	12	0	0	0	...
Canada	1	3,533	743	257	2,547	0	...	...	...
Argentina	0	1,438	834	586	103	0	0	0	...
Other countries	...	1,718	1,757	21	1,280	..	..	0	...
Totals	1	11,949	11,230	2,245	3,942	...	...	...	...
Wheat, grain—									
For domestic use:									
Unfit for human consumption:									
Canada	1	6	8,128	9,163	4,040	4	187	11	
Other countries	0	0	18	42	17	0	21	75	3,236
Other wheat:									
Canada	6	135	5,896	25,288	30,109	598	39	55	
Other countries	...	8	10	1	97	...	...	...	165
For grinding in bond and export:									
To Cuba:									
Canada	2,744	3,025	3,772	4,117	4,005	1,141	2,219	2,453	
Other countries	0	0	0	6	0	0	0	0	1,870
To other countries:†									
Canada	6,628	8,316	7,291	7,765	9,463	1,678	6,769	1,497	
Other countries	0	0	1	90	0	0	0	3	5,461
Totals	9,379	11,490	25,116	46,472	47,731	3,421	9,235	10,094	10,732
Wheat flour:				(In barrels)					
Canada	560	770	3,696	34,910	40,716	29,469	82,420	71,156	...
United Kingdom	44	...	34	30	20	9	6	...	...
Other countries	77	56	110	403	244	262	268	208	...
Totals	681	826	3,840	35,343	40,980	29,740	82,694	71,364	61,891

*Preliminary. †Free of duty.

UNITED STATES CORN IMPORTS

Imports of corn into the United States during calendar years, by leading countries of origin, as officially reported by the United States Department of Commerce, in bushels of 56 lbs (000's omitted):

From—	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931
Argentina	1,160	78	62	79,559	25,635	33,466	143	85	119	339
Belgium	..	..	..	100	28	..	..	..	..	..
Brazil	..	..	..	17	5	..	..	..	..	..
Bulgaria	..	..	..	70	..	..	..	..	..	..
Hungary	..	..	..	145	..	..	..	..	..	..
Canada	1	1	3	1,729	4,743	4,573	..	..	..	..
China	..	..	..	7	..	..	11	..	..	..
Cuba	150	337	24	48	40	5	43	12	161	..
Dominican Republic	310	73	288	413	418	182	124	63	64	270
Kwangtung	..	..	..	11	90	25	54	..	..	..
Mexico	..	..	..	15	179	3,207	2,583	..	..	..
South Africa	..	..	26	3,583	..	292	..	..	..	..
Netherlands	..	..	..	40	324	246	..	..	..	..
Roumania	..	..	..	149	..	549	..	..	..	..
Jugoslavia	..	..	..	450	..	181	..	..	..	..
British East Africa	..	..	..	..	8	206	..	..	..	..
Mozambique	..	..	..	..	..	308	..	..	..	..
All others	..	1	1	1	1	2	3	..	..	9
Totals	1,621	490	404	86,337	31,471	43,242	2,959	160	344	618

United States Rye and Corn Flour Exports

Exports of barley flour, rye flour and corn flour and meal from the United States, by calendar years, in barrels, as reported by the United States Bureau of Foreign and Domestic Commerce:

	Rye flour	Corn flour and meal
1941†	.....	*10,329
1940	.....	*37,022
1939	.....	135,616
1938	.....	108,830
1937	.....	76,197
1936	.....	87,354
1935	.....	101,427
1934	.....	131,310
1933	.....	141,653
1932	2,909	149,828
1931	12,054	177,956
1930	8,261	207,630
1929	14,764	267,121
1928	31,650	273,272
1927	38,460	387,383
1926	15,667	516,479
1925	36,747	348,139
1924	219,030	435,103
1923	194,267	624,428
1922	56,539	630,381
1921	55,654	802,794
1920	363,746	867,165

†January-September. Because of regulations imposed by war conditions the complete 1941 calendar year exports are not available. *Corn meal only.

United States Flour and Wheat Exports

Exports of flour and wheat from the United States by crop years ending June 30, with percentages of total shipped as flour, based on the reports of the Bureau of Foreign and Domestic Commerce (flour in terms of wheat at 4½ bus to the bbl):

	000's omitted— Flour, bbls	Wheat, bus	Per ct. as flour
1940-41	6,353	10,810	73
1939-40	6,519	23,636	56
1938-39	6,637	84,539	27
1937-38	4,990	83,740	22
1936-37	3,918	3,162	84
1935-36	3,323	311	95
1934-35	3,939	3,019	84
1933-34	3,873	18,799	45
1932-33	4,327	20,887	48
1931-32	8,357	96,521	28
1930-31	11,757	76,365	41
1929-30	12,994	92,175	38
1928-29	12,888	103,114	36
1927-28	12,821	145,999	28
1926-27	13,385	156,250	28
1925-26	9,542	63,189	40
1924-25	13,896	195,490	24
1923-24	17,253	78,793	50
1922-23	14,883	154,951	30
1921-22	15,798	208,321	25
1920-21	16,181	293,268	20
1919-20	21,651	122,431	44
1918-19	24,182	178,583	38
1917-18	21,880	34,119	74
1916-17	11,943	149,831	26

United States Exports of Flour to Noncontiguous Territories

Exports of wheat flour from the United States to Alaska, Hawaii and Porto Rico, by crop years, in barrels, as reported by the United States Bureau of Foreign and Domestic Commerce. These figures are not included in the total export shipments of the United States given elsewhere in the Almanack:

1940-41	Alaska	Hawaii	Porto Rico	Total
July	4,898	11,728	40,433	57,059
Aug.	12,008	19,850	41,211	73,069
Sept.	4,355	7,962	24,144	36,461
Oct.	3,626	21,100	33,098	57,824
Nov.	3,436	13,324	35,621	52,381
Dec.	1,298	13,819	38,006	53,123
Jan.	...	13,102	35,297	48,399
Feb.	...	20,644	33,014	53,658
March	...	16,109	46,093	62,202
April	...	...	...	...
May	...	...	...	...
June	...	...	...	...
Totals*	29,621	137,638	326,917	494,176
1939-40	53,743	164,203	475,250	697,196
1938-39	55,026	165,966	428,065	649,057
1937-38	44,366	160,408	458,016	662,790
1936-37	45,531	151,699	416,745	613,975
1935-36	45,869	163,735	388,465	588,069
1934-35	47,053	154,469	373,707	575,229
1933-34	46,477	130,477	403,883	580,837
1932-33	52,153	158,489	420,105	630,747
1931-32	46,707	146,591	385,876	579,174
1930-31	44,642	147,482	397,564	589,688
1929-30	51,374	145,537	423,320	620,231
1928-29	43,795	140,052	475,727	659,577
1927-28	49,464	132,034	377,931	559,429
1926-27	43,450	133,812	464,384	641,646
1925-26	46,751	127,228	392,824	566,803
1924-25	53,065	128,633	408,887	590,585
1923-24	49,253	130,143	431,246	610,642
1922-23	48,290	123,154	423,750	621,194
1921-22	51,057	115,899	390,601	557,557
1920-21	50,364	127,745	380,704	558,813
1919-20	49,299	136,215	499,691	685,205
1918-19	34,983	108,956	387,961	531,900

*Because of regulations imposed by war conditions the complete 1940-41 crop year figures are not available.

United States Wheat Imports

Imports into the United States as compiled by the United States Department of Agriculture, by crop years, in bushels (000's omitted):

	1938-39	1939-40	1940-41*
For grinding in bond and export	8,989	9,953	7,331
Total imports of wheat.	9,235	10,094	10,732
For grinding in bond and export to countries other than Cuba (free)	6,769	7,500	5,461
Total dutiable	2,466	2,594	5,271

*Preliminary.

Chicago Board of Trade

The Chicago Board of Trade was organized March 13, 1848. The first quarters were in a small room over a flour store on South Water Street. The first president of the organization was Thomas Dyer. There were 82 members.

In 1849 the Illinois legislature passed a law for the establishment of boards of trade and chambers of commerce. In 1850 the Chicago Board of Trade was incorporated. Various quarters were utilized until April 29, 1885, when another Board of Trade Building was completed at a cost of $1,750,000, the trading room being one of the largest in the United States. Eventually, the board outgrew these quarters, and a new building was erected on the same site at a cost of about $20,000,000. It was occupied May 1, 1930.

Philip R. O'Brien is president, Harvey S. Austrian first vice president, Harry C. Schaack second vice president, and Fred H. Clutton secretary.

Minneapolis Chamber of Commerce

President, E. J. Grimes; first vice president, F. P. Heffelfinger; second vice president, A. M. Howard; secretary and treasurer, E. C. Hillweg; assistant secretary and assistant treasurer, E. S. Hughes. Board of directors: E. J. Grimes, F. P. Heffelfinger, A. M. Howard, E. H. Mirick, M. R. Devaney, H. H. Tearse, J. T. Culhane, C. G. Williams, A. M. Hartwell, F. C. Lyman, C. E. Johnson, P. C. Rutherford and J. A. Bolton.

Buffalo Corn Exchange

President, C. B. Weydman; vice president, E. J. Koehnlein; secretary, W. E. Maloney; treasurer, E. H. Flinchbaugh; assistant treasurer, R. J. Murray.

Commercial Exchange of Philadelphia

President, Louis G. Graff; vice president, Philip R. Markley; treasurer, Raymond J. Barnes; secretary, Lorenzo J. Riley; managing director, John H. Frazier.

Duluth Board of Trade

President, George Barnum; vice president, K. S. Bagley; secretary-treasurer, Charles F. Macdonald; directors, H. B. Stoker, H. S. Newell, Robert S. Owens, W. J. McCabe, W. W. Bleecher, H. W. Wilson, W. R. McCarthy, G. H. Spencer, Ely Salyards.

Merchants Exchange of St. Louis

President, W. H. Toberman; first vice president, C. H. Williamson; second vice president, J. M. Adam; secretary-treasurer, W. J. Krings; assistant secretary-treasurer, M. E. Woods. Directors: R. H. Baumgartner, Walter Kuelper, R. A. Leonhardt, Julius Mayer, G. A. McCalpin, R. E. Wiese.

Hampton Roads Exports

Exports of total grain and of wheat flour from Norfolk and Newport News, Va., by calendar years:

	All grain, bus	Wheat flour, bbls
1941	691,214	2,940
1940	656,991	942
1939	1,651,159	23,351
1938	812,880	33,348
1937	39,084	9,874
1936	42,994	13,831
1935	33,922	9,938
1934	493,767	9,493
1933	418,300	36,420
1932	1,505,660	33,382
1931	1,510,035	70,430
1930	1,408,281	104,480
1929	1,014,692	134,230
1928	3,380,966	94,364
1927	1,761,524	169,382
1926	883,457	165,826
1925	388,206	148,430
1924	1,912,145	234,851
1923	2,370,301	274,591
1922	746,317	148,044
1921	485,118	119,829
1920	2,814,530	1,483,888

United States Soybean Exports and Imports

Exports and imports of soybeans in pounds by the United States by crop years and calendar years, as reported by the United States Bureau of Foreign and Domestic Commerce (000's omitted):

Crop year—	Exports	Imports
1940-41	5,077	71
1939-40	709,999	117
1938-39	214,291	140
1937-38	79,915	185
Calendar year—		
1941*	9,374	...
1940	146,465	...
1939	627,741	148
1938	158,680	180

*Because of regulations imposed by war conditions the complete calendar year exports and imports are not available.

Fort Worth Grain & Cotton Exchange

President, W. O. Brackett; vice president, K. K. Smith; secretary, E. B. Wooten; treasurer, W. P. Bomar; directors: M. C. Rall, G. E. Cranz, J. C. Crouch, A. A. Hart.

Kansas City Board of Trade

President, G. A. Johnson; first vice president, John Stark; second vice president, E. E. Klecan; treasurer, R. H. Sturtevant; assistant treasurer, W. W. Fuller; secretary, W. R. Scott; assistant secretary, C. W. Pershing.

Hutchinson Board of Trade

President, D. B. Frazee; vice president, F. I. Houser; treasurer, C. D. Jennings; secretary and transportation commissioner, W. T. Macauley. Election of new officers in June.

Omaha Grain Exchange

President, R. M. Scoular; vice president, A. McKinley; vice president, W. T. Burns; treasurer, F. C. Bell; secretary, F. P. Manchester.

Wichita Board of Trade

President, E. F. Beyer; vice president, A. B. Craig; secretary and treasurer, R. R. Roth; executive secretary, D. L. Mullen. Election of new officers is held the second Tuesday in May.

Merchants Exchange of Portland

President, L. E. Cable; vice president, F. S. Roberts; secretary-treasurer, Vincent Driscoll; manager, Stanley E. Semple.

Baltimore Chamber of Commerce

President, Gustav Herzer, Jr; vice president, J. Adam Manger; secretary-treasurer, James B. Hessong; assistant secretary, Howard G. Disney.

Executive committee: Edward Netre, chairman; Frank J. Otterbein, vice chairman; J. George Oehrl, Robert D. Sinton, and William B. F. Hax.

Memphis Merchants Exchange

President, H. B. McCoy; vice president, Ferd Heckle; secretary, James B. McGinnis.

Boston Grain & Flour Exchange

President, Frank J. Sennott; first vice president, Joseph A. Bassett; second vice president, Charles J. Koelsch; treasurer, Fred L. Colby; secretary, Louis W. DeFuss, 177 Milk Street.

Winnipeg Grain Exchange

President, Stewart A. Searle; vice presidents, K. A. Powell, C. E. Graham; acting secretary, J. T. Irving; council, Alex. Christie, W. J. Dowler, R. R. Emerson, H. L. Flood, C. C. Head, John W. Horn, Stanley N. Jones, George S. Mathieson, R. C. Reece, A. C. Reid, J. B. Richardson, Clarence H. Smith; committee of arbitration, M. Anderson, John B. Fisher, F. O. Fowler, G. N. Heimbecker, N. L. Leach, K. A. Powell, H. Sellers; committee on appeals, W. J. Dowler, H. Gauer, C. E. Graham, C. E. Hayles, Douglas Laird, W. A. Murphy, E. S. Parker.

PRICES OF AGRICULTURAL PRODUCTS AND THEIR MARKETING COSTS

A Section Devoted to Statistics Bearing on the Prices Received for Agricultural Products and the Costs Involved in Their Manufacture and Transportation Together with Price Data for the Manufactured Article

MONTHLY FLOUR PRICES AT CENTERS IN THE UNITED STATES AND CANADA

A table compiled by The Northwestern Miller from quotations reported to its branch offices and to its correspondents. Unless otherwise noted, flour is quoted per bbl of 196 lbs. packed in 98-lb cottons or 140-lb jutes, basis carload lots, prompt delivery.

	Minneapolis			Kansas City		St. Louis				Buffalo		Seattle		Toronto†		
	Spring		White	Hard winter		Hard winter		Soft winter		Spring		Family		Spring		Ontario
Year and month	1st pat.	1st clear	rye flour	short pat.	1st clear	short pat.	1st clear	short pat.	1st clear	1st pat.	1st clear	patent	Pastry	top pat.	1st clear	90% pat.
1941 average	$5.65	$4.91	$3.97	$5.18	$3.52	$5.23	$3.92	$5.95	$4.21	$5.66	$4.94	$6.54	$5.44	$5.29	$3.51	$4.33
December	6.47	5.90	4.33	5.96	4.06	5.87	4.62	6.23	4.89	6.53	5.69	7.19	5.79	5.25	3.40	5.18
November	6.02	5.56	4.19	5.71	4.11	5.64	4.39	6.39	4.64	6.15	5.36	6.92	5.55	5.25	3.40	4.73
October	6.06	5.44	4.29	5.77	4.16	5.59	4.34	6.34	4.59	6.20	5.55	6.95	5.81	5.21	3.38	4.99
September	6.30	5.45	4.50	4.85	4.09	5.48	4.22	6.28	4.55	6.29	5.55	6.85	6.02	5.15	3.30	4.99
August	6.08	5.22	4.29	5.58	3.92	5.35	4.10	6.15	4.40	6.08	5.28	6.69	5.45	5.25	3.45	4.76
July	5.75	4.99	3.89	5.40	3.78	5.10	3.85	5.90	4.15	5.86	5.27	6.79	5.63	5.39	3.64	4.02
June	5.72	4.73	3.89	5.14	3.75	5.06	3.80	5.85	4.10	5.58	5.05	6.96	5.55	5.55	3.80	4.09
May	5.63	4.65	4.10	4.89	3.47	5.09	3.79	5.89	4.09	5.36	4.54	6.49	5.16	5.56	3.83	4.11
April	5.29	4.35	3.77	4.63	2.90	4.92	3.53	5.72	3.87	5.26	4.44	6.08	5.12	5.37	3.62	4.05
March	4.92	4.28	3.60	4.35	2.72	4.82	3.40	5.55	3.70	4.94	4.26	5.88	5.03	5.30	3.55	3.79
February	4.64	4.09	3.38	4.28	2.56	4.61	3.35	5.36	3.56	4.75	4.05	5.81	5.07	5.20	3.45	3.80
January	4.90	4.22	3.42	4.64	2.67	5.27	3.69	5.78	3.92	4.86	4.28	5.87	5.08	5.05	3.30	3.52

	Minneapolis			Kansas City		St. Louis				Buffalo		Seatt'e		Toronto†		
	Spring		White	Hard winter		Hard winter		Soft winter		Spring		Family		Spring		Ontario
Year and month	1st pat.	1st clear	rye flour	short pat.	1st clear	short pat.	1st clear	short pat.	1st clear	1st pat.	1st clear	patent	Pastry	top pat.	1st clear	90% pat.
1940 average	$5.23	$4.35	$3.79	$4.77	$3.05	$5.50	$3.70	$5.81	$4.02	$5.17	$4.58	$6.17	$4.98	$5.60	$3.84	$3.48
December	4.75	4.06	3.43	4.76	2.74	5.55	3.65	5.85	4.00	4.83	4.28	5.86	5.06	5.03	3.28	3.44
November	4.92	4.17	3.56	4.75	2.77	5.50	3.60	5.79	3.95	4.90	4.35	5.72	5.08	4.95	3.20	3.40
October	4.92	4.16	3.63	4.62	2.73	5.44	3.54	5.74	3.89	4.92	4.36	5.98	4.83	4.99	3.24	3.67
September	4.68	3.86	3.11	4.35	2.60	5.09	3.20	5.38	3.55	4.68	4.14	6.01	4.73	5.22	3.48	3.08
August	4.59	3.66	2.99	4.20	2.72	4.85	3.15	5.10	3.50	4.52	3.97	5.97	4.71	5.45	3.70	2.87
July	4.95	3.88	3.15	4.32	2.85	4.87	3.34	5.12	3.69	4.74	4.05	6.01	4.70	5.45	3.70	3.06
June	4.99	4.13	3.58	4.63	2.88	5.13	3.60	5.38	3.95	4.83	4.18	6.13	4.69	5.50	3.75	3.35
May	5.64	4.78	4.16	5.08	3.26	5.73	3.87	6.04	4.19	5.64	4.96	6.33	5.01	5.99	4.24	3.85
April	5.82	4.85	4.43	5.33	3.61	6.19	4.13	6.34	4.38	5.97	5.28	6.47	5.18	6.30	4.55	3.95
March	5.70	4.82	4.38	5.06	3.41	5.70	3.98	6.28	4.23	5.76	5.19	6.33	5.25	6.18	4.43	4.10
February	5.65	4.87	4.38	5.00	3.44	5.95	4.10	6.35	4.40	5.78	5.07	6.54	5.23	6.00	4.25	3.58
January	6.18	4.94	4.65	5.21	3.60	6.04	4.19	6.39	4.54	5.48	5.17	6.70	5.23	6.11	4.27	3.58

†Quotations for spring top patent and spring first clear are based on 98-lb jutes; those for Ontario 90% patents on second-hand jutes.

CHICAGO WHEAT AND RYE FLOUR PRICES

Range of prices of wheat and rye flour in Chicago during 1941, basis car lots, per barrel, in jutes or cottons:

	Patent		Short patent		Patent rye
	Spring standard	Spring top	Hard winter	Soft winter	White
Jan. 4	$4.30@4.80	$4.50@5.00	$4.40@4.70	$4.50@4.70	$3.40@3.50
Jan. 11	4.30@4.60	4.50@4.70	4.45@4.65	4.50@4.90	3.30@3.50
Jan. 18	4.40@4.60	4.55@4.85	4.40@4.65	4.40@4.70	3.30@3.55
Jan. 25	4.30@4.60	4.45@4.95	4.30@4.60	4.30@4.80	3.30@3.40
Feb. 1	4.20@4.40	4.40@4.75	4.15@4.30	4.30@4.65	3.25@3.40
Feb. 8	4.20@4.40	4.35@4.65	4.15@4.45	4.20@4.40	3.00@3.40
Feb. 15	4.10@4.30	4.25@4.55	4.10@4.30	4.20@4.40	3.25@3.35
Feb. 22	4.10@4.30	4.25@4.70	4.00@4.30	4.25@4.50	3.20@3.40
March 1	4.15@4.50	4.35@4.80	4.20@4.50	4.35@4.55	3.30@3.40
March 8	4.20@4.50	4.50@4.80	4.20@4.40	4.30@4.50	3.40@3.70
March 15	4.35@4.45	4.50@4.80	4.25@4.50	4.20@4.35	3.45@3.75
March 22	4.50@4.90	4.65@5.05	4.35@4.70	4.30@4.60	3.45@3.75
March 29	4.65@4.80	4.75@5.00	4.65@4.80	4.40@4.60	3.50@3.70
April 5	4.70@4.85	4.85@5.00	4.60@4.80	4.50@4.70	3.65@3.95
April 12	4.70@4.90	4.90@5.15	4.40@4.70	4.45@4.65	3.50@3.75
April 19	4.60@5.00	4.80@5.25	4.55@4.80	4.50@4.75	3.65@3.85
April 26	4.75@5.00	4.85@5.25	4.70@4.90	4.40@4.70	3.55@3.65
May 3	4.75@5.00	4.85@5.30	4.70@4.95	4.60@4.90	3.55@4.00
May 10	5.00@5.25	5.20@5.45	4.95@5.10	4.75@5.00	3.85@4.15
May 17	5.00@5.40	5.25@5.60	5.00@5.40	4.95@5.20	4.00@4.30
May 24	5.10@5.40	5.30@5.70	4.90@5.25	4.80@5.00	3.70@4.10
May 31	4.70@5.10	4.90@5.40	4.85@5.00	4.60@4.85	3.70@4.10
June 7	4.80@5.40	5.00@5.60	4.75@5.20	4.65@4.85	3.60@3.85
June 14	5.10@5.40	5.20@5.65	5.10@5.35	4.80@5.10	3.60@3.85
June 21	4.90@5.25	5.20@5.60	4.75@5.10	4.80@5.00	3.70@4.00
June 28	5.10@5.40	5.35@5.65	5.20@5.40	5.00@5.40	3.75@3.90
July 5	5.20@5.50	5.30@5.70	5.00@5.25	4.80@5.20	3.65@3.80
July 12	5.20@5.40	5.30@5.80	5.25@5.40	4.80@5.30	3.70@3.90
July 19	5.00@5.40	5.15@5.60	5.00@5.30	4.90@5.20	3.60@3.90
July 26	5.15@5.60	5.30@5.80	5.10@5.45	5.00@5.40	3.60@3.95
Aug. 2	5.20@5.75	5.35@5.90	5.20@5.60	5.00@5.40	3.80@4.10
Aug. 9	5.40@6.10	5.55@6.20	5.40@5.95	5.10@5.60	4.00@4.45
Aug. 16	5.30@6.15	5.50@6.25	5.40@5.95	4.90@6.00	4.00@4.45
Aug. 23	5.55@6.05	5.70@6.20	5.40@5.85	5.30@5.70	4.10@4.50
Aug. 30	5.40@6.00	5.50@6.20	5.40@5.95	5.20@5.70	4.10@4.50
Sept. 6	5.50@6.15	5.60@6.30	5.50@6.00	5.30@5.75	4.20@4.60
Sept. 13	5.60@6.20	5.80@6.40	5.60@6.10	5.40@5.90	4.20@4.65
Sept. 20	5.60@6.15	5.70@6.30	5.50@6.10	5.30@5.80	4.15@4.65
Sept. 27	5.60@6.20	5.70@6.35	5.60@6.15	5.50@6.00	4.20@4.50
Oct. 4	5.65@6.20	5.80@6.40	5.60@6.15	5.50@5.90	4.20@4.60
Oct. 11	5.50@6.00	5.70@6.10	5.60@6.00	5.30@5.70	4.10@4.40
Oct. 18	5.30@5.65	5.40@5.85	5.35@5.70	5.30@5.60	3.70@4.10
Oct. 25	5.40@5.80	5.50@6.00	5.55@5.80	5.35@5.65	3.85@4.20
Nov. 1	5.40@5.80	5.50@6.00	5.50@5.85	5.35@5.70	3.80@4.20
Nov. 8	5.55@6.10	5.70@6.30	5.50@5.85	5.40@5.75	3.90@4.25
Nov. 15	5.45@5.90	5.65@6.10	5.50@5.85	5.40@5.70	4.00@4.20
Nov. 22	5.45@5.95	5.60@6.05	5.50@5.90	5.45@5.60	3.95@4.20
Nov. 29	5.50@5.85	5.60@6.05	5.50@5.90	5.40@5.75	3.85@4.20
Dec. 6	5.70@6.05	5.80@6.25	5.70@6.05	5.40@5.80	3.85@4.25
Dec. 13	6.10@6.50	6.30@6.60	6.05@6.50	5.90@6.20	4.10@4.40
Dec. 20	5.95@6.30	6.15@6.50	5.90@6.30	5.50@6.05	4.15@4.40
Dec. 27	5.95@6.30	6.15@6.50	5.95@6.40	5.55@6.10	4.20@4.35

CHICAGO WHEAT PRICES

Lowest and highest prices for contract spot wheat in Chicago, and the months in which extreme prices were reached, in dollars per bushel:

Yrs.	Months lowest prices were reached	Yearly range	Months highest prices reached
1941	February.	$ .85 @1.28¼	December
1940	August	.69⅜@1.16	April
1939	July	.59 @1.10	December
1938	August	.59½@1.16	February
1937	November.	.92 @1.51	April
1936	June	.90½@1.44⅝	December
1935	July	.81 @1.31	October
1934	April	.75½@1.16¼	August
1933	January	.45 @1.17⅜	July
1932	December.	.44½@ .70½	January
1931	October	.44⅝@ .84½	May
1930	November.	.71⅝@1.29	January
1929	May	.98 @1.48	February
1928	August	1.06½@2.15	April
1927	October	1.21⅝@1.58	May
1926	September	1.30 @1.94	January
1925	April	1.35¼@2.20½	January
1924	March	1.02 @1.91	December
1923	July	.96½@1.38	March
1922	Aug., Sept.	1.00 @1.73	May
1921	November	1.00½@2.06⅝	January
1920	November	1.58 @3.50	January
1919	August	2.20 @3.50	December
1918	Jan., May.	2.17 @2.42	December
1917	February.	1.51½@3.45	May
1916	June	.98¼@2.02	October
1915	August	.98 @1.68	February
1914	July	.77⅝@1.31	December
1913	October	.80⅜@1.15⅜	January
1912	Nov., Dec.	.85 @1.22	April, May
1911	April	.83¼@1.17	October
1910	November.	.89½@1.29½	July
1909	August	.99¼@1.60	June
1908	July	.84½@1.11	May
1907	January	.71 @1.22	October
1906	Aug., Sept.	.69⅛@ .94⅝	May
1905	August	.77⅞@1.24	February
1904	January	.81¼@1.22	Sep. Oc. Dec.
1903	March	.70¼@ .93	September
1902	October	.67½@ .95	September
1901	July	.63⅛@ .79⅛	December
1900	January	.61½@ .87½	June
1899	December.	.64 @ .79½	May
1898	October	.62 @1.85	May
1897	April	.64⅛@1.09	December
1896	August	.53 @ .94⅝	November
1895	January	.48⅜@ .85⅝	May
1894	September.	.50 @ .65⅛	April
1893	July	.54 @ .88	April
1892	October	.69⅛@ .91⅝	February
1891	July	.85 @1.16	April
1890	February.	.74⅛@1.08¼	August
1889	June	.75½@1.08⅜	February
1888	April	.71¼@2.00	September
1887	August	.66⅝@ .94⅝	June

TERMINAL WHEAT PRICES

Weighted average price of wheat at Minneapolis, Kansas City and St. Louis, as reported by the United States Department of Agriculture, in cents per bushel:

NO. 1 NORTHERN SPRING, MINNEAPOLIS

Year beginning July—	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mch.	Apr.	May	June	Weighted average*
1941†	100	106	114	110	114	123	..	..	..	..	..	..	..
1940†	79	74	82	88	89	88	90	85	90	95	98	101	90
1939†	78	76	93	88	91	103	105	104	104	108	101	82	97
1938†	88	78	76	73	73	77	80	78	77	78	86	84	73
1937†	151	133	134	127	115	120	127	125	119	111	105	105	123
1936†	136	147	146	148	144	159	166	159	153	156	146	145	147
1935†	113	127	133	134	128	128	133	131	124	123	114	124	126
1934†	108	120	121	115	114	117	118	115	113	119	116	105	116
1933	108	94	90	85	86	83	88	90	88	83	94	103	91
1932	57	58	58	54	49	48	50	49	53	63	74	80	60
1931	61	65	69	71	80	73	75	75	70	71	68	60	68
1930	92	91	87	82	75	77	76	75	76	79	81	74	83
1929	143	135	135	131	128	131	127	125	112	111	107	100	133
1928	138	119	119	116	116	115	121	128	125	120	111	116	118
1927	147	143	134	129	130	132	135	134	139	153	157	148	136
1926	172	149	143	140	146	146	143	142	139	138	147	149	146
1925	159	164	150	149	155	169	173	167	176	164	162	163	161
1924	137	131	130	146	148	166	189	187	171	150	167	164	156
1923	112	118	121	120	114	116	119	121	121	121	122	125	117
1922	149	111	110	115	123	125	123	126	124	130	128	117	120
1921	167	148	151	134	125	131	134	151	151	158	161	149	143
1920	288	256	254	216	179	166	179	172	166	153	157	169	207

NO. 2 RED WINTER, ST. LOUIS

1941	103	109	116	113	117	127	..	..	..	..	..	..	..
1940	76	77	83	90	92	91	93	86	90	93	97	102	82
1939	69	69	88	88	92	104	105	106	106	111	104	87	75
1938	69	66	67	69	66	70	73	73	73	76	83	73	70
1937	122	112	109	104	93	95	100	99	92	85	77	75	113
1936	106	117	119	121	123	135	140	143	143	144	139	122	111
1935	87	92	103	110	105	106	109	109	108	107	102	95	96
1934	92	101	104	100	101	104	102	98	95	97	93	86	94
1933	101	92	89	86	90	87	91	91	89	83	87	91	94
1932	47	53	54	50	47	46	50	49	55	69	81	82	55
1931	48	47	47	52	62	57	57	57	55	57	56	49	52
1930	85	89	88	87	83	83	78	79	78	80	79	72	83
1929	139	132	135	132	129	135	134	123	118	117	114	105	130
1928	147	138	145	144	145	139	142	140	135	125	117	121	139
1927	141	142	142	145	141	144	151	156	169	196	196	179	149
1926	142	134	136	140	136	137	138	135	130	129	142	150	138
1925	159	172	171	170	171	184	194	185	170	171	162	147	169
1924	135	138	140	156	168	179	210	202	186	177	186	189	159
1923	97	99	109	116	112	114	116	118	114	113	112	116	107
1922	112	109	114	123	129	136	137	139	136	139	133	123	121
1921	123	123	136	126	120	121	122	138	142	141	138	118	127
1920	273	251	258	226	202	199	202	190	166	141	158	150	213

NO. 2 HARD WINTER, KANSAS CITY

1941	98	107	114	112	113	120	..	..	..	..	..	..	..
1940	71	69	76	82	85	84	85	78	85	87	90	97	82
1939	67	65	86	83	86	98	101	99	102	106	95	76	74
1938	70	66	66	65	63	67	71	69	69	70	76	71	70
1937	122	112	110	106	94	96	103	100	92	85	80	77	111
1936	111	122	122	122	122	134	138	137	139	140	132	121	121
1935	99	104	115	119	113	111	113	110	106	102	95	96	105
1934	93	107	108	102	102	104	101	100	97	105	99	88	98
1933	98	90	87	83	84	80	84	85	82	78	86	89	88
1932	45	48	48	45	43	42	44	44	48	60	70	76	51
1931	44	43	43	48	59	52	53	54	51	53	54	46	47
1930	80	81	78	74	69	71	69	69	70	73	73	68	76
1929	125	123	124	122	119	121	119	113	102	101	99	89	120
1928	120	106	107	110	112	111	114	118	116	110	101	105	112
1927	136	135	131	128	131	132	133	133	138	152	160	147	135
1926	137	131	132	139	137	138	137	135	133	131	142	144	135
1925	154	164	158	158	163	172	178	171	161	159	155	153	163
1924	120	119	120	137	143	162	182	181	171	151	163	160	135
1923	96	101	109	112	109	109	113	111	109	104	106	108	105
1922	113	104	104	113	117	117	114	115	116	120	116	104	113
1921	118	115	122	110	109	109	113	129	134	135	134	117	120
1920	268	245	244	207	176	169	172	162	155	133	147	138	183

*Average of daily prices weighted by car-lot sales. †No. 1 dark northern spring. ‡Simple average.

ENGLISH DECENNIAL WHEAT PRICES

Average prices of wheat per quarter of 480 lbs, in each decade since 1650, as given by the Westminster Gazette:

Year—	Av. price	Year—	Av. price	Year—	Av. price	Year—	Av. price
1941	62s 10d	1870	46s 11d	1790	54s 9d	1710	42s 4d
1940	28s 1d	1860	53s 3d	1780	35s 8d	1700	32s 6d
1930	45s 7d	1850	40s 4d	1770	42s 6d	1690	30s 9d
1920	54s 9d	1840	66s 4d	1760	32s 5d	1680	40s 0d
1910	30s 5d	1830	64s 3d	1750	28s 10d	1670	27s 0d
1900	28s 5d	1820	67s 10d	1740	45s 1d	1660	50s 2d
1890	28s 6d	1810	106s 5d	1730	32s 5d	1650	68s 1d
1880	44s 4d	1800	113s 10d	1720	35s 10d		

Andrew Taylor & Co.

(Glasgow) Ltd.

Flour Importers

163, Hope Street GLASGOW, C. 2, SCOTLAND

Telegrams:
"Goldenglo"

Telephone:
Central 1487.

Codes:
BENTLEY
RIVERSIDE

UNITED STATES WHEAT MARKETINGS

Department of Agriculture estimates of the percentage of wheat sold by farmers of the United States by months:

	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mch.	Apr.	May	June	Season
1940-41	5.4	21.8	13.1	9.0	6.1	4.1	3.8	3.8	3.3	6.2	8.8	8.7	5.9	100.0
1939-40	7.6	23.0	13.4	9.0	6.1	4.1	5.2	3.5	6.6	7.9	10.5	2.4	1.1	100.0
1938-39	5.8	24.9	17.2	11.6	7.8	4.7	4.7	3.6	3.2	3.7	3.9	5.2	3.7	100.0
1937-38	9.1	30.2	16.3	10.4	6.0	3.8	4.0	3.8	3.9	3.3	3.9	3.3	2.0	100.0
1936-37	5.8	35.4	15.8	8.7	6.8	4.3	5.6	3.1	3.4	3.8	2.7	2.9	1.7	100.0
1935-36	2.5	19.2	26.8	17.7	9.7	4.5	3.8	3.7	2.5	3.4	2.6	2.2	2.4	100.0
1934-35	11.9	30.4	15.3	9.4	5.2	4.2	4.4	2.9	3.5	2.9	4.4	3.5	2.0	100.0
1933-34	9.3	21.9	19.8	13.3	7.0	5.0	3.7	3.7	3.4	3.5	2.7	3.1	3.6	100.0
1932-33	4.9	18.5	19.3	14.0	7.9	5.5	4.8	3.6	3.5	3.5	4.4	5.4	4.7	100.0
1931-32	6.2	26.9	18.5	10.0	7.9	4.6	4.5	3.9	5.5	3.4	3.4	3.8	1.4	100.0
1930-31	4.4	26.0	20.2	11.9	6.9	4.4	4.7	4.7	4.8	3.5	3.2	4.0	1.3	100.0
1929-30	5.2	25.6	22.2	14.0	8.6	4.8	4.5	3.1	2.9	2.5	2.4	2.6	1.6	100.0
1928-29	1.4	18.8	18.4	17.3	12.0	7.2	5.4	4.2	4.2	3.5	2.8	2.7	2.1	100.0
1927-28	2.7	15.1	18.0	19.8	12.6	7.8	5.3	4.5	4.0	3.7	2.5	2.7	1.3	100.0
1926-27	1.7	22.2	20.8	13.5	9.5	5.9	5.1	4.6	4.7	3.7	2.7	3.4	2.2	100.0

MONTHLY MARKETINGS BY STATES, 1940-41

	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mch.	Apr.	May	June
New York	..	3	43	11	7	6	4	5	2	3	4	7	5
Pennsylvania	..	18	19	11	7	6	6	5	5	6	5	6	6
Ohio	..	34	14	5	5	3	4	4	4	8	9	5	5
Indiana	..	42	12	4	4	3	4	3	4	6	9	3	6
Illinois	..	51	11	3	3	2	2	2	2	5	11	4	4
Michigan	..	12	24	7	6	5	5	5	6	8	6	7	9
Minnesota	..	4	19	12	10	6	5	5	4	6	5	12	12
Iowa	..	33	13	6	5	3	3	2	2	4	15	9	5
Missouri	..	42	13	4	3	3	3	2	2	9	10	4	5
North Dakota	..	2	20	23	8	5	3	2	2	6	9	10	10
South Dakota	..	7	23	13	7	5	4	3	2	5	9	10	12
Nebraska	..	35	9	3	3	2	2	2	2	4	6	12	20
Kansas	13	32	7	4	4	3	4	5	5	6	8	9	..
Maryland	..	41	18	8	6	4	4	3	3	4	3	3	3
Virginia	..	20	15	10	8	7	6	4	5	6	7	7	5
North Carolina	18	25	10	7	5	5	5	5	3	5	5	7	..
Kentucky	..	41	10	6	5	4	4	3	2	9	5	3	8
Tennessee	7	34	19	10	6	4	4	3	3	4	3	3	..
Oklahoma	29	26	5	4	4	3	3	4	3	5	8	6	..
Texas	18	45	3	2	2	1	2	2	2	3	8	12	..
Montana	..	5	13	14	12	4	3	3	2	5	9	17	13
Idaho	..	5	14	8	8	6	6	6	4	12	18	8	5
Colorado	..	25	17	6	5	4	4	4	5	3	9	11	7
Washington	..	5	13	11	9	8	8	7	5	10	13	8	3
Oregon	..	3	14	11	10	7	4	6	5	14	15	6	5
California	12	21	19	10	7	6	5	5	2	5	4	4	..
United States—													
1940-41	5.4	21.8	13.1	9.0	6.1	4.1	3.8	3.8	3.3	6.2	8.8	8.7	5.9
1939-40	7.6	23.0	13.4	9.0	5.7	4.1	5.2	3.5	6.6	7.9	10.5	2.4	1.1
1929-30 to 1938-39	6.5	25.8	19.0	12.1	7.4	4.6	4.5	3.6	3.7	3.4	3.4	3.6	2.4

WINNIPEG AVERAGE PRICES

Average daily closing prices of cash No. 1 northern wheat at Winnipeg by months and crop years, in cents per bushel (fractions omitted):

Crop of—	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Average of years
1941-42	73	73	74	73	74	77	..	..	..	..	..	..	74
1940-41	72	72	70	72	73	74	75	76	76	76	77	75	74
1939-40	55	74	70	71	83	83	84	87	89	80	72	71	77
1938-39	77	63	61	59	61	60	60	60	61	66	62	55	65
1937-38	132	134	142	135	137	149	145	138	138	115	114	98	131
1936-37	102	104	111	109	120	125	127	136	139	131	124	146	123
1935-36	84	90	91	86	85	85	82	82	80	77	79	93	84
1934-35	86	82	78	80	79	79	79	82	87	86	82	81	82
1933-34	73	67	61	64	60	67	65	66	66	71	77	82	68
1932-33	56	52	48	47	42	44	46	49	54	63	67	83	54
1931-32	55	54	60	67	60	60	63	63	62	63	55	55	60
1930-31	92	78	72	64	55	54	59	57	60	61	61	57	64
1929-30	158	149	141	133	137	130	117	106	110	108	103	95	124
1928-29	118	117	123	121	117	121	128	127	122	113	118	160	124
1927-28	160	145	144	145	140	142	142	148	156	157	142	130	146
1926-27	151	143	143	141	133	135	139	142	145	155	161	162	146
1925-26	167	137	127	142	157	156	154	148	157	153	153	158	150
1924-25	143	142	159	164	172	196	196	176	156	182	171	162	168
1923-24*	112	106	97	97	93	96	99	98	98	104	114	135	104
Average of months	103	99	99	99	99	96	103	102	103	103	102	105	101

*Crop year changed to begin with August.

Crop of—	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Av. of years
1922-23	100	101	109	109	108	111	113	120	117	115	108	113	106
1921-22	148	115	111	113	114	134	141	143	144	133	136	118	129
1920-21	273	232	205	193	194	188	191	176	186	189	183	180	199
1919-20	230	230	230	230	280	280	280	280	301	315	315	305	273
1918-19	224	224	224	224	224	224	224	224	224	224	229	...	224
1917-18	224	221	221	221	221	221	221	221	221	221	221	221	221
1916-17	169	174	195	175	179	170	187	230	270	246	236	239	207
1915-16	94	97	103	110	122	122	109	115	117	111	118	149	114
1914-15	112	113	119	119	136	153	149	156	159	133	134	113	133
1913-14	86	80	83	83	85	89	90	90	94	92	92	109	89
1912-13	96	90	83	80	82	84	85	90	93	97	97	94	89
Average of months	141	136	136	133	140	142	143	148	153	150	151	145	...

AVERAGE PRICES OF MILLFEED

Average monthly prices of various millfeeds at Minneapolis, Kansas City and Buffalo, based on carload lots, prompt delivery, per ton, in 100-lb sacks:

	Minneapolis		Kansas City		Buffalo	
1941—	Bran	Std. midds.	Bran	Gray shorts	Bran	Std. midds.
January	$21.50	$21.30	$19.90	$24.95	$25.50	$25.20
February	19.69	19.62	18.50	18.87	23.87	23.50
March	20.69	19.94	19.62	19.75	23.88	23.62
April	21.05	20.80	19.50	21.50	24.80	24.50
May	19.06	19.87	17.50	20.87	23.12	22.62
June	20.37	22.50	19.19	23.75	23.75	24.00
July	23.70	26.10	22.70	27.50	28.15	29.70
August	26.12	26.19	25.00	27.19	29.75	29.75
September	30.19	30.56	28.06	29.00	34.12	34.31
October	26.95	26.95	25.85	27.45	31.40	31.50
November	29.31	29.25	26.94	28.94	32.50	32.50
December	30.15	30.10	28.60	30.50	34.10	34.10
1940—						
January	21.30	20.95	19.75	22.35	24.80	24.15
February	21.88	21.19	20.58	22.62	25.75	25.06
March	22.44	21.56	21.00	23.81	25.88	25.25
April	24.00	24.00	23.19	25.62	27.75	27.00
May	22.30	23.00	20.80	24.30	25.90	25.70
June	17.31	21.00	16.69	23.50	21.88	22.77
July	18.05	21.90	17.30	21.15	22.90	25.30
August	16.62	16.87	15.69	17.69	21.06	21.44
September	17.69	18.19	16.69	18.94	21.25	21.62
October	19.15	19.30	18.00	21.00	22.20	22.20
November	22.25	21.75	20.06	21.44	25.50	25.12
December	21.31	20.88	19.81	20.88	25.50	25.00
1939—						
January	18.25	18.15	16.13	18.62	21.63	22.25
February	17.44	17.44	16.42	19.75	22.00	21.50
March	19.45	19.80	18.55	22.00	23.30	23.40
April	22.37	22.50	20.81	21.69	25.61	25.12
May	19.60	21.75	18.20	23.10	24.15	24.75
June	16.44	21.50	14.69	21.12	20.50	21.00
July	14.75	17.56	13.25	17.94	18.87	21.75
August	14.55	15.50	13.45	16.70	18.30	19.55
September	21.50	22.50	19.94	24.31	24.75	25.12
October	18.51	18.50	17.19	20.50	21.81	24.37
November	21.06	21.06	19.50	23.69	23.75	23.75
December	20.75	20.80	19.05	22.80	24.15	24.15
1938—						
January	22.06	21.56	20.10	....	26.10	25.10
February	20.44	20.42	19.40	....	24.75	24.75
March	20.40	20.15	19.05	....	24.50	24.10
April	18.40	18.13	16.62	....	22.40	23.00
May	18.50	18.81	17.19	....	22.12	21.90
June	15.95	19.15	14.75	....	19.75	22.55
July	14.87	18.19	13.81	....	19.50	22.40
August	13.25	13.85	12.05	....	17.40	17.90
September	13.50	14.75	12.19	....	16.75	17.50
October	13.25	14.25	11.88	....	16.75	18.00
November	14.95	15.10	11.55	....	18.25	18.65
December	16.50	17.15	14.25	....	19.75	20.25

MONTHLY HIGH AND LOW BRAN PRICES AT MINNEAPOLIS

The following table shows the monthly high and low prices for bran at Minneapolis for the past five years, in dollars per ton:

	1936		1937		1938		1939		1940		1941	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
January	$14.50	$16.50	$35.50	$33.00	$24.00	$19.50	$18.50	$18.00	$21.00	$21.50	$22.00	$21.00
February	15.00	16.50	33.50	29.00	21.00	19.75	18.00	17.00	20.50	23.00	20.75	19.00
March	15.00	16.50	36.50	30.00	21.00	19.00	20.50	18.50	21.75	23.00	22.75	19.00
April	15.50	18.75	38.00	33.50	19.50	17.50	26.00	19.50	23.50	24.50	22.50	19.00
May	13.25	16.50	34.00	30.50	19.50	17.25	23.00	17.50	19.00	24.50	19.50	18.25
June	13.00	19.00	31.00	20.00	17.00	14.50	17.00	16.00	16.50	18.25	22.00	18.50
July	20.50	28.50	28.50	22.00	15.50	14.25	15.50	14.00	15.50	20.50	25.00	22.50
August	24.00	27.00	20.00	18.00	14.50	12.75	15.00	14.00	16.00	18.00	28.00	25.00
September	23.00	25.00	19.50	16.75	14.50	13.00	24.00	19.50	17.00	18.25	31.00	29.50
October	23.50	27.50	20.00	17.50	14.00	13.00	19.50	17.50	18.00	20.50	28.75	25.50
November	27.00	31.50	21.00	18.50	15.50	14.00	22.00	20.00	21.00	23.50	30.00	28.50
December	30.50	33.50	19.50	18.00	17.00	15.50	21.50	19.50	20.75	22.25	31.50	29.00

MINNEAPOLIS FLOUR PRICE RANGE

High and low quotations of first patent flour at Minneapolis by months:

1941		1938		1935		1932	
Dec.	$6.15@ 6.80	Dec.	$5.35@ 5.40	Dec.	$8.20@ 8.85	Dec.	$3.80@ 4.20
Nov.	5.90@ 6.20	Nov.	5.10@ 5.45	Nov.	8.10@ 8.90	Nov.	3.80@ 4.30
Oct.	5.75@ 6.50	Oct.	5.10@ 5.35	Oct.	8.45@ 9.25	Oct.	4.10@ 4.50
Sept.	6.05@ 6.55	Sept.	5.15@ 5.45	Sept.	8.05@ 8.95	Sept.	4.20@ 4.75
Aug.	5.95@ 6.25	Aug.	5.00@ 5.45	Aug.	7.95@ 8.65	Aug.	4.25@ 4.75
July	5.45@ 6.00	July	5.50@ 5.95	July	7.20@ 8.55	July	4.05@ 4.65
June	5.55@ 5.90	June	5.45@ 6.55	June	6.85@ 7.35	June	4.20@ 4.75
May	5.35@ 5.80	May	5.25@ 5.45	May	7.20@ 8.05	May	4.40@ 5.10
April	5.00@ 5.50	April	5.50@ 5.70	April	7.40@ 8.00	April	4.50@ 5.15
March	4.55@ 5.50	March	5.35@ 6.10	March	7.05@ 7.70	March	4.15@ 5.15
Feb.	4.35@ 5.05	Feb.	5.95@ 6.20	Feb.	7.30@ 7.90	Feb.	4.65@ 5.25
Jan.	4.60@ 5.15	Jan.	5.75@ 6.35	Jan.	7.30@ 7.85	Jan.	4.60@ 5.30
1940		**1937**		**1934**		**1931**	
Dec.	$4.50@ 5.00	Dec.	$5.60@ 6.00	Dec.	$7.40@ 7.90	Dec.	$4.50@ 5.15
Nov.	4.70@ 5.15	Nov.	5.40@ 6.10	Nov.	7.40@ 7.85	Nov.	4.90@ 5.60
Oct.	4.75@ 5.20	Oct.	5.85@ 6.45	Oct.	7.30@ 7.95	Oct.	4.20@ 5.05
Sept.	4.50@ 4.90	Sept.	6.15@ 7.10	Sept.	7.60@ 8.15	Sept.	4.25@ 4.90
Aug.	4.25@ 5.05	Aug.	6.30@ 7.35	Aug.	7.60@ 8.35	Aug.	4.30@ 4.90
July	4.65@ 5.35	July	7.25@ 8.30	July	7.00@ 8.05	July	4.20@ 4.90
June	4.70@ 5.30	June	6.80@ 7.90	June	7.00@ 7.70	June	4.70@ 5.35
May	5.10@ 6.10	May	7.25@ 7.95	May	6.65@ 7.75	May	4.90@ 5.45
April	5.50@ 6.05	April	7.15@ 8.50	April	6.40@ 7.00	April	4.85@ 5.25
March	5.45@ 5.90	March	7.45@ 8.40	March	6.70@ 7.35	March	4.85@ 5.25
Feb.	5.45@ 5.90	Feb.	7.55@ 8.30	Feb.	6.80@ 7.50	Feb.	5.20@ 5.55
Jan.	5.60@ 7.00	Jan.	7.55@ 8.30	Jan.	6.95@ 7.45	Jan.	5.20@ 5.55
1939		**1936**		**1933**		**1930**	
Dec.	$6.30@ 7.20	Dec.	$7.00@ 8.30	Dec.	$6.80@ 7.20	Dec.	$5.10@ 5.55
Nov.	6.00@ 6.40	Nov.	6.80@ 7.25	Nov.	6.90@ 7.60	Nov.	5.00@ 5.40
Oct.	5.90@ 6.20	Oct.	7.00@ 7.55	Oct.	6.45@ 7.50	Oct.	5.10@ 5.55
Sept.	6.10@ 6.35	Sept.	6.95@ 7.60	Sept.	7.15@ 7.90	Sept.	5.30@ 5.70
Aug.	5.15@ 5.55	Aug.	7.15@ 7.80	Aug.	7.20@ 8.00	Aug.	5.50@ 5.95
July	4.90@ 5.35	July	6.60@ 7.30	July	6.45@ 9.10	July	5.60@ 6.10
June	5.25@ 5.75	June	6.10@ 7.20	June	5.20@ 7.00	June	5.70@ 6.60
May	5.45@ 5.95	May	6.05@ 6.70	May	5.15@ 5.50	May	6.00@ 6.60
April	5.10@ 5.25	April	6.40@ 7.10	April	4.40@ 5.40	April	6.00@ 6.90
March	5.10@ 5.25	March	6.95@ 7.55	March	3.80@ 4.50	March	6.25@ 6.90
Feb.	5.20@ 5.50	Feb.	7.05@ 7.65	Feb.	3.80@ 4.20	Feb.	6.30@ 6.95
Jan.	5.35@ 5.50	Jan.	7.30@ 8.90	Jan.	3.80@ 4.20	Jan.	6.90@ 7.40

Winnipeg Average Flour Prices

A table showing the average price of top patent spring wheat flour at Winnipeg, by months. Prices are per barrel, for delivery between Fort William and the Alberta boundary.

	1941	1940	1939	1938	1937	1936
January	$4.64	$5.74	$4.60	$7.70	$7.17	$5.40
February	4.80	5.75	4.55	7.60	7.10	5.30
March	4.90	5.88	4.50	7.42	7.40	5.30
April	5.00	5.93	4.30	7.47	7.67	5.28
May	5.10	5.52	4.37	6.82	7.40	5.20
June	5.20	5.16	4.40	6.84	7.18	5.08
July	5.12	5.10	4.18	6.65	8.38	5.58
August	5.22	5.10	4.24	5.84	7.85	6.08
September	5.10	5.10	5.42	5.15	7.60	6.00
October	5.18	4.86	5.32	5.04	7.80	6.45
November	5.10	4.53	5.34	4.84	7.80	6.28
December	5.18	4.60	5.70	4.75	7.56	6.62
Average	$5.05	$5.27	$4.74	$6.34	$7.50	$5.71

Chicago Soybean Prices

High and low prices for No. 2 yellow soybeans, in the Chicago market, by months for the past two years:

	1940	1941
January	$1.07¼@1.21	$ .98⅛@1.0[illegible]
February	1.03⅝@1.10⅜	.91¼@1.0[illegible]
March	1.09½@1.18⅜	.94½@1.1[illegible]
April	1.07½@1.10½	1.11 @1.2[illegible]
May	.87½@1.10½	1.22 @1.4[illegible]
June	.79 @ .83½	1.30½@1.5[illegible]
July	.79 @ .86	1.42⅛@1.5[illegible]
August	.77 @ .83½	1.52⅛@1.6[illegible]
September	.78 @ .84½	1.76 @1.9[illegible]
October	.74⅛@ .86¼	1.47½@1.8[illegible]
November	.86½@1.07¼	1.53⅜@1.7[illegible]
December	.87½@1.01	1.60⅛@1.73¾
Range	$ .74¼@1.21	$ .91¼@1.94

UNITED STATES FARM PRICES, BY MONTHS

Department of Agriculture estimates of average prices paid to producers in the United States, in cents per bushel, on the fifteenth day of each month, with weighted averages for the crop years:

WHEAT

Year—	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mch.	Apr.	May	June	Av'ge
1941-42	85.6	88.5	95.8	91.0	93.4	102.2	...	...	...	...	...	...	...
1940-41	61.4	60.1	62.6	68.2	72.5	71.5	73.0	67.8	71.8	76.0	79.4	83.1	69.2
1939-40	55.7	54.5	72.7	70.2	73.1	82.4	84.5	84.1	85.0	88.9	80.7	67.4	69.2
1938-39	60.8	50.7	52.5	52.2	52.0	53.6	57.1	56.9	56.7	57.8	63.0	62.5	56.1
1937-38	112.8	99.4	93.0	88.7	81.9	83.6	88.6	86.6	80.3	75.0	71.4	69.7	96.3
1936-37	94.1	105.1	104.3	106.8	106.5	114.5	123.6	124.9	123.2	126.6	118.3	108.9	102.6
1935-36	76.4	81.5	86.2	96.3	88.7	90.1	92.0	91.1	89.5	85.4	81.6	79.9	83.2
1934-35	78.8	89.6	92.2	88.5	88.1	90.6	89.3	87.9	85.5	90.2	87.8	77.3	84.8
1933-34	86.9	74.7	71.1	63.6	71.1	67.3	69.4	72.0	70.9	68.7	69.5	78.9	74.4
1932-33	35.6	38.5	37.4	34.6	32.8	31.6	32.9	32.3	34.5	44.8	59.0	58.7	38.2
1931-32	36.3	35.4	35.7	36.1	50.5	44.1	44.1	44.0	44.2	43.1	42.4	37.3	39.0
1930-31	70.6	74.0	70.3	65.6	60.0	61.3	59.1	58.7	58.3	59.2	59.9	51.9	67.1

CORN

Year—	Oct.	Nov.	Dec.	Jan.	Feb.	Mch.	Apr.	May	June	July	Aug.	Sept.	Av'ge
1941-42	64.9	63.7	66.9	...	...	...	...	...	...	...	...	...	...
1940-41	59.4	56.9	54.5	56.0	56.0	57.1	62.0	65.9	68.3	69.6	70.0	70.8	61.8
1939-40	47.6	46.8	50.3	53.2	54.7	56.0	58.6	63.4	63.5	63.1	63.1	61.9	56.7
1938-39	41.9	40.0	43.1	45.1	43.9	44.4	45.4	48.3	49.9	47.8	45.7	56.2	50.0
1937-38	58.9	48.0	48.5	52.2	51.7	51.3	52.7	52.7	52.3	53.7	48.5	48.0	51.8
1936-37	97.9	94.6	95.6	100.6	103.6	105.4	119.1	121.2	117.2	118.1	102.6	93.9	104.5
1935-36	71.8	56.4	53.0	53.5	55.5	56.4	57.2	60.0	61.3	80.2	103.7	104.7	65.5
1934-35	76.7	75.7	85.3	85.3	84.5	82.7	85.2	84.8	83.3	82.4	80.8	78.0	81.5
1933-34	38.8	40.6	42.0	43.9	45.6	47.1	47.1	48.6	56.0	59.2	72.7	77.4	52.2
1932-33	21.6	19.4	18.8	19.1	19.4	20.6	28.2	38.9	40.2	55.4	48.8	46.5	31.9
1931-32	33.4	36.6	34.5	33.7	32.4	32.2	31.4	30.1	29.4	29.9	30.2	28.0	32.0
1930-31	81.9	66.3	64.9	61.7	58.6	57.5	57.7	56.3	53.8	54.0	50.8	43.2	59.6

OATS

Year—	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mch.	Apr.	May	June	Av'ge
1941-42	32.7	32.5	39.9	38.9	41.1	45.2	...	...	...	...	...	...	...
1940-41	28.3	26.7	27.0	28.3	31.7	32.3	33.3	32.9	33.7	35.2	34.0	33.3	30.3
1939-40	26.5	25.4	31.5	30.3	32.1	34.7	36.3	37.7	38.6	38.8	36.6	32.7	31.1
1938-39	24.0	20.3	21.8	22.1	22.5	24.4	26.3	26.2	26.9	27.4	29.5	29.9	23.7
1937-38	42.5	28.5	29.0	28.8	28.7	29.1	30.0	30.0	29.4	28.3	27.5	25.3	30.1
1936-37	35.2	43.0	43.5	43.1	44.2	48.4	52.7	53.7	52.5	54.6	53.5	48.1	44.9
1935-36	32.2	26.9	25.8	27.0	25.8	25.5	25.9	26.6	26.7	25.4	25.1	24.3	26.3
1934-35	40.6	45.8	50.3	50.5	51.1	53.9	54.6	54.7	54.1	53.5	49.8	41.9	48.3
1933-34	39.1	32.2	32.3	27.9	31.4	31.4	32.5	34.1	33.9	32.6	32.7	38.9	33.5
1932-33	17.5	14.8	14.4	13.1	13.1	13.0	13.4	13.3	13.7	17.3	21.7	23.1	15.7
1931-32	23.3	19.8	20.0	20.1	23.2	23.0	22.7	22.8	22.8	22.8	21.8	19.8	21.3
1930-31	33.1	35.7	36.1	34.7	31.5	32.3	31.1	30.7	30.1	30.2	28.6	26.1	32.2

BARLEY

Year—	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mch.	Apr.	May	June	Av'ge
1941-42	45.2	42.6	51.9	49.1	53.2	56.1	...	...	...	...	...	...	...
1940-41	36.3	36.4	37.2	38.2	40.6	41.6	42.5	42.3	42.2	44.9	46.2	46.5	39.7
1939-40	35.5	34.5	42.8	42.2	42.2	43.8	45.9	46.1	46.1	46.2	45.3	40.8	40.3
1938-39	38.9	34.5	35.3	36.1	34.7	36.5	38.0	37.6	38.0	37.9	39.2	39.4	36.6
1937-38	64.4	52.2	52.8	52.0	50.7	50.8	54.0	54.8	52.9	50.4	49.0	42.9	54.0
1936-37	56.1	81.3	82.6	84.2	82.7	86.1	90.4	93.4	89.9	90.0	86.1	71.4	78.4
1935-36	41.2	35.1	37.3	39.4	37.8	37.5	38.6	39.6	39.7	38.6	37.1	37.0	37.8
1934-35	52.6	63.5	78.2	75.5	75.9	79.7	80.2	79.2	76.0	74.4	66.0	55.0	68.6
1933-34	47.6	40.2	42.8	40.7	41.6	40.6	43.7	44.7	43.7	42.5	42.2	50.9	43.5
1932-33	24.6	21.1	20.1	18.2	20.1	19.3	18.4	17.9	18.3	23.4	29.9	28.3	22.1
1931-32	30.0	28.9	30.9	31.6	35.5	35.7	35.7	35.8	37.2	37.1	33.7	28.7	32.8
1930-31	40.0	43.6	45.3	41.9	38.3	38.8	36.6	35.3	34.4	35.2	35.5	32.6	40.5

RYE

Year—	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mch.	Apr.	May	June	Av'ge
1941-42	46.4	49.4	57.3	51.3	54.2	57.8	...	...	...	...	...	...	...
1940-41	38.4	36.8	38.3	40.5	42.8	41.3	43.6	41.2	43.1	46.5	48.1	47.1	41.6
1939-40	34.3	34.2	44.0	45.1	44.6	52.3	56.7	55.7	55.6	57.1	52.4	40.3	44.0
1938-39	41.1	32.4	32.0	32.9	32.1	32.3	34.7	33.9	32.9	33.0	36.4	39.1	33.8
1937-38	81.0	70.6	68.1	63.8	60.8	59.2	64.1	63.4	58.7	52.2	49.8	46.0	68.6
1936-37	61.1	75.1	79.5	80.4	81.5	90.0	97.9	98.9	95.8	99.9	96.0	85.3	80.9
1935-36	36.0	35.5	36.5	42.1	40.4	40.0	41.4	44.4	42.9	40.8	40.6	43.8	39.5
1934-35	61.8	73.9	79.1	75.0	71.9	74.4	73.1	69.3	66.5	66.0	62.0	53.7	71.8
1933-34	78.2	58.8	61.4	52.7	55.4	51.9	53.6	54.2	53.1	52.8	51.9	58.2	62.7
1932-33	22.0	23.3	23.6	22.3	22.1	21.1	22.7	21.9	22.8	30.1	38.9	43.5	28.1
1931-32	33.0	32.5	33.2	33.6	41.4	36.8	36.8	36.3	37.7	36.6	33.4	28.8	34.1
1930-31	43.6	53.0	53.1	47.6	41.6	44.1	37.4	34.9	34.3	32.8	33.0	31.4	44.5

FLAXSEED

Year—	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mch.	Apr.	May	June	Av'ge
1941-42	171.0	168.0	185.0	164.0	160.0	178.0	....	....	....	....	....	....	....
1940-41	144.0	136.0	131.0	127.0	139.0	141.0	154.0	152.0	153.0	173.0	168.0	164.0	142.0
1939-40	139.0	135.0	153.0	163.0	164.0	180.0	194.0	188.0	191.0	191.0	176.0	156.0	146.0
1938-39	160.7	154.9	159.2	162.5	159.8	164.3	171.1	163.0	164.0	164.0	160.0	161.0	159.0
1937-38	185.8	183.3	189.2	188.7	181.0	181.2	192.7	190.7	185.6	180.3	174.0	161.9	187.0
1936-37	184.3	191.8	186.9	186.1	190.2	194.7	209.2	203.4	197.6	198.2	191.9	173.0	190.0
1935-36	133.7	134.5	135.3	151.8	153.2	156.4	161.3	159.9	153.9	148.3	147.3	146.8	142.0
1934-35	168.0	176.7	175.2	167.1	161.7	168.8	167.7	167.0	159.4	161.3	156.0	149.3	169.9
1933-34	188.8	163.0	164.4	149.0	155.1	151.1	161.4	164.8	160.4	155.0	163.7	167.8	162.6
1932-33	80.8	79.3	88.1	87.7	87.1	82.8	90.8	87.1	88.0	94.8	118.6	136.3	88.1
1931-32	132.6	120.4	113.1	106.5	121.9	118.7	116.1	116.0	118.7	116.1	106.7	86.2	116.6
1930-31	192.7	191.9	168.1	152.2	133.6	137.6	131.7	126.2	130.4	128.6	129.9	120.1	161.0

Minneapolis Yearly Flour Prices

Average prices of flour at Minneapolis, per barrel, by calendar years:

Year	1st pat	1st clear	Year	1st pat	1st clear
1941...	$5.65	$4.91	1927...	$7.82	$6.29
1940...	5.23	4.35	1926...	8.76	6.87
1939...	5.62	4.18	1925...	9.16	7.44
1938...	5.58	4.40	1924...	7.53	5.45
1937...	7.06	5.63	1923...	6.70	5.20
1936...	7.20	5.25	1922...	7.37	5.31
1935...	7.95	6.25	1921...	8.76	5.72
1934...	7.40	5.76	1920...	12.61	9.50
1933...	6.05	4.50	1919...	12.00	9.07
1932...	4.51	3.37	1918..	*10.11	...
1931...	4.93	3.54	1917...	11.34	9.80
1930...	5.99	4.63	1916...	7.09	5.73
1929...	7.08	5.36	1915...	6.66	5.41
1928...	7.50	5.91	1914...	5.10	3.90

*Standard Victory flour.

United States Average Retail Flour Price

Average retail flour prices in 51 cities as reported by the Bureau of Labor Statistics, in cents per ten pounds:

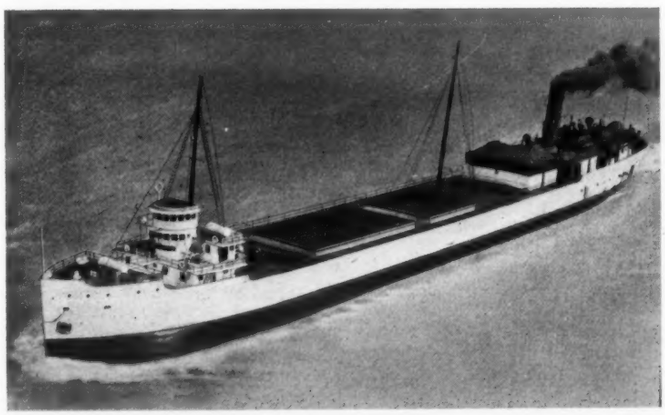
(Ten pounds)	1936	1937	1938	1939	1940	1941
January	49.2	49.4	42.6	36.3	44.5	41.4
February	48.0	47.0	42.5	36.3	44.6	41.3
March	47.5	49.7	42.2	36.2	44.9	41.7
April	46.7	50.1	41.2	35.8	45.2	43.1
May	45.9	49.7	40.7	35.7	45.5	43.9
June	45.3	49.3	39.6	36.2	43.9	45.1
July	46.0	49.1	39.7	36.1	42.6	46.1
August	47.9	48.9	39.0	35.8	41.6	46.6
September	48.6	47.4	37.3	39.6	40.1	47.5
October	48.8	46.6	37.0	41.8	40.3	48.3
November	48.4	44.7	36.7	42.1	40.8	48.5
December	48.3	42.7	36.5	42.6	41.3	49.2
Average	47.6	47.9	39.6	37.9	42.9	45.2

AVERAGE BREAD PRICES IN UNITED STATES

Department of Labor figures showing the average retail price per pound (baked weight) of bread in leading cities of the United States, on the 15th day of each month, in cents:

	Jan.	Feb.	Mch.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av'ge
1941	7.8	7.8	7.8	7.8	7.8	7.9	7.9	8.3	8.5	8.7	8.6	8.6	8.1
1940	8.1	8.2	8.2	8.2	8.2	8.1	8.1	8.1	8.1	7.8	7.8	7.8	8.0
1939	8.1	8.0	8.0	8.0	8.0	8.0	8.0	7.9	7.9	7.9	7.9	8.1	7.8
1938	8.9	8.9	8.9	8.9	8.8	8.8	8.8	8.7	8.4	8.2	8.2	8.2	8.6
1937	8.4	8.4	8.5	8.6	8.7	8.8	8.9	8.9	8.9	8.9	8.9	8.9	8.7
1936	8.5	8.4	8.3	8.2	8.2	8.1	8.1	8.2	8.2	8.2	8.2	8.2	8.2
1935	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.4	8.5	8.6	8.4
1934	7.9	7.9	7.9	8.0	8.0	8.1	8.2	8.3	8.4	8.4	8.3	8.3	8.2
1933	6.4	6.4	6.4	6.4	6.5	6.6	7.2	7.6	7.8	8.0	8.0	7.9	7.1
1932	7.1	7.0	7.0	6.9	6.9	6.9	6.8	6.8	6.7	6.7	6.7	6.6	6.8
1931	8.2	8.0	7.9	7.7	7.7	7.6	7.5	7.4	7.3	7.3	7.3	7.2	7.6
1930	8.9	8.8	8.8	8.8	8.8	8.8	8.8	8.7	8.7	8.6	8.5	8.5	8.7

NAVIGATION ON GREAT LAKES NOW OPEN



OUR FLEET of modern package freighters is ready to give you the same efficient and prompt service we have been noted for throughout the years. Expert supervision in the handling of flour and feed assured. Our direct connections with rail carriers at all major ports eliminate delay in transshipment. Route your eastbound flour and feed shipments lake-and-rail, and save time and money. Our docks and warehouses are especially equipped to handle mill products.

GREAT LAKES TRANSIT CORPORATION

BOSTON BUFFALO CHICAGO CLEVELAND DETROIT ERIE NEW YORK MINNEAPOLIS ST. PAUL DULUTH PHILADELPHIA PITTSBURGH HOUGHTON SAULT ST. MARIE

GRAIN AND FLOUR IMPORTS AND EXPORTS OF FOREIGN COUNTRIES

A Section Devoted to Statistics Dealing With the Import and Export Trade of Countries Foreign to the United States in Grain and Grain Products—Figures Are Given for the Past Year and a Number of Previous Years

Canadian Wheat and Flour Exports

Exports of Canadian wheat and flour by countries of destination expressed as wheat (4½ bus per bbl) in crop year 1939-40, according to the Dominion Bureau of Statistics, Ottawa. These are the most recent figures as the Canadian government war-time regulations prohibit the publication of statistics revealing exports and countries of destination.

	Bus
Great Britain and Northern Ireland	132,573,620
Eire	3,701,684
Belgium	7,861,346
Belgian Colonies	648
Denmark	2,789,596
Finland	253,351
France	1,110,497
French Colonies	143,829
Germany	292,444
Greece	261,305
Greenland-Iceland	35,879
Italy	46,394
Latvia	547,535
Malta and Gibraltar	135,307
Netherlands	9,508,984
Netherland Colonies	160,871
Norway	6,553,099
Portugal	712,063
Portuguese Colonies	119,082
Spain	212,945
Sweden	1,042,670
Switzerland	4,002,536
British South Africa	475,166
British West Africa	121,667
Southern Rhodesia	9,334
Egypt	19,752
Liberia	4,783
Morocco	10,309
Aden	3,668
China	126,531
Hongkong	389,264
India	54
Japan	379,782
Fiji Islands	267
Philippine Islands	656,913
Straits Settlements	18,706
Palestine and Syria	194,547
Persia	4,293
Australia	644
New Zealand	675
Brazil	83,421
British Guiana	739,980
Colombia, S. A.	913,099
Ecuador	225
Peru	4,221
Uruguay	126
Venezuela	134,204
Bermuda	101,012
West Indies	4,249,965
Central America	247,595
Newfoundland	1,457,230
Alaska	27
United States—	
For home consumption	1,016,986
For grinding in bond	9,164,302
(Wrecked)	79,995
	192,674,368

Canadian Flour Imports

Imports of flour into Canada by crop years ended July 31, by principal countries of origin, in barrels. These are the most recent figures since the Canadian government war-time regulations prohibit the publication of statistics revealing exports and countries of destination.

	1937-38	1938-39	1939-40
United Kingdom	123	128	56
United States	76,887	61,403	84,537
Hongkong	7	15	14
Australia	10,709	12,337	10,483
Newfoundland	...	...	...
Alaska	9	32	35
Norway	3	...	...
	87,738	73,915	95,125

Canadian Wheat Exports

Exports of wheat from Canada by crop years ended July 31, to principal countries of destination, in bushels (000's omitted). These are the most recent figures since the Canadian government war-time regulations prohibit the publication of statistics revealing exports and countries of destination.

	1939-40	1938-39	1937-38	1936-37
U. Kingdom	82,239	76,394	55,444	124,369
United States	79,376	29,245	1,803	14,868
Br. West Ind.	15	13	12	11
Br. S. Africa	431	29	15	10
China	...	33	..	..
Colombia	195	414	65	180
Belgium	2,155	10,832	4,523	14,051
Denmark	437	1,501	656	757
France	886	4,422	2,286	2,277
Finland	93	162	168	242
Fr. Africa	..	694	370	..
Germany	221	5,730	1,287	1,907
Italy	116	550	185	1,783
Irish F. State	2,158	3,809	2,566	2,749
Japan	..	..	546	1,987
Latvia	547	..	..	..
Netherlands	2,448	6,254	1,967	4,464
N. Zealand	..	119	128	127
Norway	3,904	3,683	1,620	2,076
Port. Africa	34	90	77	28
Greece	..	659	1,697	1,154
Salvador	54	6	..	65
So. Rhodesia	30	..	..	..
Sweden	84	922	219	137
Malta	19	145	60	40
Russia	..	..	..	4
Switzerland	1,932	229	36	..
Morocco	..	..	980	1,513
British India	..	294	..	..
Others	1	11	13	59
Totals	177,375	146,240	76,713	174,858

CANADIAN WHEAT FLOUR EXPORTS

Exports of wheat flour from Canada by crop years ended July 31, to principal countries of destination, in barrels of 196 lbs (000's omitted). These are the most recent figures, since the Canadian government war-time regulations prohibit the publication of statistics revealing exports and countries of destination.

	1939-40	1938-39	1937-38	1936-37	1935-36	1928-29
United Kingdom	4,300	2,455	2,084	2,327	2,459	2,638
Newfoundland	324	294	238	264	263	300
Barbados	72	41	31	55	55	72
Jamaica	296	252	201	234	286	423
Trinidad and Tobago	343	256	176	199	201	299
Other British West Indies	197	160	137	144	133	186
British South Africa	3	3	2	2	2	67
British East Africa	..	..	..	..	..	2
British Guiana	164	95	85	99	78	144
Bermuda	22	24	26	26	26	14
British Honduras	16	11	11	14	14	13
New Zealand	..	..	..	13	68	66
Austria	..	..	..	..	..	50
Belgium	1	1	1	1	1	4
Brazil	4	9	6	2	9	10
Costa Rica	13	7	4	4	7	5
Colombia	..	..	..	..	..	5
Dutch East Indies	12	12	10	12	17	..
Dutch West Indies	20	13	10	10	11	3
Dutch Guiana	4	3	1	6	7	4
Esthonia	..	..	..	..	..	12
France	..	..	..	1	1	2
French Africa	..	..	..	..	..	4
French Guiana	5	1	2	10	19	7
Guatemala	3	4	1	9	13	1
Malta	21	53	21	23	32	71
Hongkong	87	135	117	115	154	319
China	28	138	40	61	76	3,041
Czecho-Slovakia	..	..	..	..	1	103
Cuba	9	17	..	..	2	32
Denmark	1	..	..	1	14	328
Egypt	..	1	2	7	9	362
Finland	6	19	15	20	29	297
French West Indies	23	8	12	18	15	72
Germany	..	..	..	..	5	1,097
Greece	..	..	..	..	..	237
Iceland	8	8	2	1	1	5
Gold Coast	2	2	1	5	5	11
Haiti	2	2	2	6	10	41
Italy	..	1	1	1	1	60
Irish Free State	10	8	6	7	9	242
Japan	84	3	2	256	173	48
Netherlands	23	27	16	33	64	260
Norway	250	204	110	175	182	449
Azores and Madeira	..	..	..	2	1	25
Portuguese Africa	9	10	8	9	11	26
Philippine Islands	146	140	133	161	214	32
Panama	6	4	4	8	9	14
Sierra Leone	24	17	15	15	14	2
San Domingo	7	8	3	6	6	6
Sweden	4	4	2	7	4	79
Venezuela	29	30	19	33	32	90
United States	162	96	40	85	180	3
St. Pierre and Miquelon	3	3	3	4	4	5
Nigeria	..	..	..	..	..	8
Palestine	14	7	1	..	3	17
Korea	..	..	..	..	..	21
Liberia	1	2	1	2	1	3
Morocco	2	..	..	..	..	5
Poland and Danzig	..	..	..	..	..	7
Spanish Africa	..	..	..	..	..	6
Syria	..	..	..	..	..	40
Turkey	..	..	..	..	..	4
Portugal	3	..	..	..	..	..
Southern Rhodesia	2	..	..	..	..	..
Straits Settlements	4	..	..	..	..	..
Virgin Islands	6	..	..	..	..	..
Others	6	16	7	32	47	9
Totals	6,781	4,604	3,609	4,525	4,978	11,808

CANADIAN CROP YEAR EXPORTS

Exports of wheat flour and grains from Canada by crop years ended July 31 (000's omitted):

	Wheat flour	Wheat	Oats	Barley	Rye	Flaxseed
1940-41	10,289	177,968	11,205	2,097	4,544	76
1939-40	6,781	177,380	15,812	12,148	4,571	18
1938-39	4,604	146,240	9,603	16,499	1,758	14
1937-38	3,609	76,713	4,776	14,744	648	16
1936-37	4,525	174,858	5,997	17,555	3,633	178
1935-36	4,978	232,019	11,981	7,676	2,456	19
1934-35	4,750	144,375	14,605	15,057	1,187	12
1933-34	5,455	170,234	6,088	1,711	2,580	187
1932-33	5,371	240,136	11,076	5,391	2,866	794
1931-32	5,383	182,803	13,611	13,538	9,047	251
1930-31	6,702	228,536	7,822	19,250	2,090	1,998
1929-30	6,778	155,766	2,000	2,605	348	415
1928-29	11,809	354,425	12,828	40,148	5,751	1,935
1927-28	9,866	288,567	12,168	26,442	11,265	2,386
1926-27	9,248	251,266	6,677	38,795	8,301	3,278
1925-26	10,897	275,557	33,293	34,181	6,223	2,953
1924-25	10,170	146,958	34,636	27,772	6,336	4,966
1923-24	11,991	289,190	37,625	15,396	7,571	3,482
1922-23	11,069	229,682	23,561	13,842	10,175	2,322
1921-22	7,879	158,550	27,038	12,422	4,521	2,631
1920-21	6,887	136,174	28,714	10,816	3,219	2,834

INTERNATIONAL TRADE IN WHEAT AND FLOUR

The following table shows net exports and imports of wheat and flour included in terms of wheat for the principal countries of the world by crop years ended July 31, as compiled from official sources by the Food Research Institute, Stanford University, in million bushels:

	Net exports of net-exporting countries										Net imports of Europe ex-Danube	
Year—Aug-July	Total	United States	Canada	Australia	Argentina	*Lower Danube	French N. Africa	India	Others ex-Russia	U.S.S.R.	Total	British Isles	Continent
1940-41	495	31	231	90	96	*14	17	..	¶16	..	*320	*245	*75
1939-40	625	45	192	86	179	87	17	1	¶18	..	*445	*240	*205
1938-39	643	103	158	96	122	85	10	(1)	35	34	428	247	181
1937-38	556	117	90	126	72	54	15	19	20	43	404	208	196
1936-37	623	(17)	210	102	162	89	6	19	30	5	443	212	231
1935-36	518	(31)	246	102	70	25	20	1	25	29	339	220	119
1934-35	540	(4)	163	109	182	22	26	1	35	2	350	217	133
1933-34	557	33	192	86	147	35	20	0	10	34	387	238	149
1932-33	641	45	262	150	132	12	20	(1)	3	17	441	234	207
1931-32	795	114	207	156	140	82	22	2	7	65	606	261	345
1930-31	839	105	269	152	125	46	17	(5)	11	114	609	245	364
1929-30	634	143	192	63	151	56	14	1	5	9	505	224	281
1928-29	937	153	397	109	222	37	13	(25)	6	(6)	667	219	448

Figures in parentheses represent net imports not included in totals. *Approximations. ¶Includes U. S. S. R.

Vancouver Shipments

Exports of flour and grain from Vancouver and other British Columbia ports, as reported by the Vancouver Merchants' Exchange (000's omitted):

FLOUR, BBLS

	1939	1938	1937	1936
Europe	77	25	27	50
Orient	406	164	427	699
Others	31	152	37	225
Totals	514	341	491	974

GRAIN, BUS

	1940	1939	1938	1937
U. Kingdom	5,914	33,598	25,218	18,341
Orient	190	103	61	1,235
Central and S. America	184	469	56	184
Other	48	564	248	208
Totals	6,337	34,734	25,583	19,968

Due to war restrictions no figures are available on the movement of flour in 1940 and 1941.

Canadian Oatmeal Exports

Exports of rolled oats and oatmeal from Canada by crop years ended Aug. 31 by countries of destination, in cwts (100 lbs). These are the most recent figures since the Canadian government war-time regulations prohibit the publication of statistics revealing exports and countries of destination.

	*1939-40	1938-39	1937-38	1936-37
U. Kingdom	†1,202,559	695,111	567,903	491,048
Bermuda	1,270	581	750	1,198
Br. E. Africa	...	55	58	19
Br. S. Africa	14,592	12,977	11,625	12,165
S. Rhodesia	1,174	1,071	749	761
Br. W. Africa	...	280	232	354
Br. Guiana	2,116	2,485	2,156	2,443
Br. Honduras	11	1	...	6
Br. India	12,765	11,653	13,697	13,681
Br. S. Settlements	...	2	280	...
Br. West Indies—				
Barbados	1,774	1,178	803	1,360
Jamaica	2,558	1,769	1,361	1,538
Trinidad-Tobago	1,318	1,272	1,165	2,216
Other B. W. Indies	1,175	1,385	1,526	1,102
Hongkong	531	1,576	6	90
Malta	63	...	38	40
Newfoundland	12,168	12,793	8,513	9,927
N. Zealand	...	...	18	11
Belgium	6,926	188	242	199
Belgian Congo	...	391	158	172
Ceylon	730	565	648	1,947
China	533	1,834	447	1,272
Colombia	13,758	7,795	...	90
France	8,881	16,033	16,966	17,152
Switzerland	8,760	...	...	...
Iceland	19,015	...	...	...
St. Pierre-Miq.	45	65	155	52
Guatemala	1,171	682	...	...
Netherlands	...	504	...	567
Dutch Guiana	...	...	...	37
Port. Africa	757	599	546	576
U. S. A.	1,873	3	6	4,504
Philippine Isl.	...	361	180	180
Alaska	...	...	1	...
Venezuela	16,326	2,158	148	156
Others	3,941	3,388	651	238
Totals	1,336,790	778,799	631,028	563,881

*Figures for 1939-40 are for crop year ending July 31. †Includes exports to Irish Free State.

Canadian Wheat Flour Exports to the Philippine Islands, by Calendar Years

These are the most recent figures since the Canadian government war-time regulations prohibit the publication of statistics revealing exports and countries of destination.

	1937	1938	1939	1940
January	23,932	11,424	16,483	5,277
February	8,051	11,853	6,322	6,596
March	8,687	19,328	12,345	14,510
April	6,339	7,694	12,927	19,566
May	9,138	11,302	12,302	14,820
June	13,752	6,851	16,104	12,927
July	15,488	12,849	10,204	11,496
August	14,238	6,950	10,851	8,259
September	11,665	8,852	11,075	7,160
October	8,950	10,882	14,548	5,913
November	6,595	13,676	11,470	11,353
December	10,446	12,604	13,041	17,836
	137,281	134,265	147,672	134,413

Cuban Flour Imports

Imports of wheat flour into Cuba by months and calendar years at all ports in sacks of 200 lbs (000's omitted):

	1936	1937	1938	1939	1940	1941
January	86	96	103	92	91	94
February	103	105	71	113	95	261
March	109	75	99	86	99	314
April	94	87	85	74	97	419
May	87	88	89	87	115	529
June	74	73	79	83	76	597
July	77	68	73	80	59	682
August	53	92	103	107	61	746
September	103	78	76	147	66	829
October	56	83	89	61	88	939
November	82	92	77	51	86	1,019
December	99	104	90	63	93	1,158
Totals	1,023	1,041	1,034	1,042	1,027	7,587

ARGENTINE WHEAT AND FLOUR PRODUCTION AND CONSUMPTION

A table prepared by the Bureau of Agricultural Economics, United States Department of Agriculture, giving details of the consumption of wheat and flour in Argentina, wheat in bushels, flour in barrels (000's omitted in both cases):

CALENDAR YEAR FOLLOWING HARVEST

		Wheat			Wheat flour		
Crop year—	Production of wheat	Exports	Balance remaining in country	Amount ground	Production	Exports	Consumption*
1941-42*.....	220,460‡	.....	.....	.....	.....	.....	.....
1940-41*.....	299,458	.....	.....	.....	.....	.....	.....
1939-40.....	130,733	133,749	.....	76,805	16,374	796	15,578
1938-39.....	379,142	174,382	204,760	79,088	17,194	1,110	16,084
1937-38.....	207,600	71,295	136,305	78,431	17,261	945	16,310
1936-37.....	249,910	142,828	107,082	71,797	15,967	1,071	14,896
1935-36.....	141,462	59,171	82,291	71,432	15,462	897	14,565
1934-35.....	240,669	141,831	98,838	74,409	16,151	996	15,155
1933-34.....	286,120	176,138	109,982	73,257	15,916	1,242	14,674
1932-33.....	240,889	144,373	96,516	69,786	15,073	1,113	13,960
1931-32.....	219,696	126,466	93,230	67,426	14,565	652	13,913
1930-31.....	232,285	133,697	98,588	69,856	14,930	969	13,961
1929-30.....	162,576	81,327	81,249	65,334	13,982	1,173	12,809
1928-29.....	349,051	242,996	106,055	67,533	14,617	1,541	13,076
1927-28.....	282,299	194,687	87,712	69,260	14,969	1,902	13,067
1926-27.....	230,073	155,259	74,814	67,780	14,558	1,908	12,650
1925-26.....	191,141	74,764	116,377	62,487	13,090	1,599	11,491
1924-25.....	191,138	109,988	81,150	60,050	12,994	1,545	11,449
1923-24.....	247,807	161,090	86,717	62,141	13,453	†1,963	†9,786
1922-23.....	195,842	136,187	59,655	49,328	10,531	923	9,608
1921-22.....	191,012	139,700	51,312	48,089	10,268	1,277	8,991
1920-21.....	156,138	62,613	93,520	50,545	10,705	715	9,990
1919-20.....	216,954	183,991	32,963	49,399	10,467	2,024	8,443
1918-19.....	180,182	120,748	59,434	57,562	12,123	3,691	8,432

*Includes carry-over. †In the source these two items do not add to total flour production. ‡Preliminary.

IMPORTS OF FLOUR INTO THE UNITED KINGDOM†

Figures showing imports of flour into the United Kingdom by calendar years, as reported by the British Board of Trade, in hundredweights of 112 lbs:

	United States	France	Argentina	Australia	Canada	Oth. countries	Total
1939.....	132,132	694,407	338,331	1,562,945	4,473,563	131,715	7,333,093
1938.....	394,994	180,294	389,314	2,930,994	3,653,485	128,814	7,677,895
1937.....	107,607	404,273	409,920	3,313,629	4,043,724	227,314	8,506,467
1936.....	77,586	730,602	272,383	2,469,612	4,104,132	712,407	8,366,722
1935.....	89,528	887,839	202,451	1,805,657	4,225,592	770,403	7,981,469
1934.....	128,642	1,285,394	246,132	1,926,926	4,226,558	1,634,592	9,448,244
1933.....	118,886	1,397,044	363,340	2,733,258	4,323,031	907,786	9,843,347
1932.....	461,997	440,077	478,114	2,831,623	3,974,075	343,646	8,529,532
1931.....	2,077,583	1,012,956	717,127	2,558,335	3,894,610	486,477	10,747,088
1930.....	3,178,100	1,184,097	586,728	1,713,105	4,492,227	584,270	11,738,527
1929.....	2,536,495	577,593	758,779	1,332,439	3,723,966	774,174	9,703,446
1928.....	1,913,686	108,189	820,716	980,568	4,879,538	224,164	8,926,861
1927.....	2,915,726	69,705	810,314	1,776,514	5,129,087	259,561	10,960,907

†Because of the war no figures are published by the government since December, 1939.

Argentine Flour Exports

The following table gives the exports of Argentine flour† by countries of destination, in metric tons:

Country—	1939	1938	1937	1936
Germany	5	26	513	494
Belgium	300	1,490	1,673	182
Bolivia	6,360	7,507	6,538	3,537
Brazil	16,551	21,910	30,878	29,607
Cuba	*...	*...	*...	*...
Chile	4,609	3,978	5,122	492
Finland	17	100	2	1
Denmark	3	3	6	5
Spain	222	2	131	77
France	914	2,147	1,438	779
Italy	7,247	3,213	4,148	3,674
Norway	45	24	17	11
Netherlands ..	2,391	3,222	1,797	652
Paraguay	15,367	17,183	17,750	12,231
Spanish Possessions†	4,237	*...	*...	4,553
English Possessions	10	24	44	151
Portuguese Possessions† ...	*...	*...	*...	*...
French Possessions†	..	62	*...	154
Great Britain.	16,228	22,039	20,847	14,414
Sweden	48	40	46	133
Uruguay	67	21	24	12
Greece	337	159	425	388
Others	‡23,760	887	3,797	8,128
Totals	98,718	84,037	95,196	79,783

*If any, included in others. †In Africa. ‡Includes 20,748 metric tons to U. S. ¶Figures for 1941 not available because of war-time restrictions; 1940 total, 70,765 tons. Source: Anuario del Comercio Exterior.

Australian Flour Exports by Countries

The following table gives exports of flour from Australia** by countries of destination by crop years, in short tons (000's omitted):

Country—	1934 –35	1935 –36	1936 –37	1937 –38	1938 –39
Egypt	27	24	35	19	17
United Kingdom ..	99	131	177	188	119
Netherlands E. Ind.	82	82	75	83	97
British Malaya	62	56	67	65	67
Philippine Islands..	27	40	36	27	33
Ceylon	*.	*.	†18	†14	†19
Hongkong	51	44	41	66	23
Mauritius and India	30	28	‡9	‡11	‡14
Malta	1	6	5	9	9
Portug. E. Africa..	6	7	8	7	8
Other countries	313	199	94	147	323
Totals	698	617	565	630	725

Source: Quarterly Summary of Australian Statistics.

*Included with Mauritius and India. †Beginning with 1936-37, exports from India and Ceylon. ‡Beginning with 1936-37, exports only from Mauritius.

**Figures for 1939-40 and 1940-41 not available because of war-time restrictions; 1939-40 total, 685,000 tons.

Exports to Newfoundland

Exports of Canadian flour to Newfoundland, by crop years ending July 31, in barrels. These are the most recent figures since the Canadian government war-time regulations prohibit the publication of statistics revealing exports and countries of destination.

1939-40.....	323,829	1933-34.....	341,000
1938-39.....	294,391	1932-33.....	317,000
1937-38.....	237,584	1931-32.....	255,000
1936-37.....	263,961	1930-31.....	272,000
1935-36.....	263,000	1929-30.....	247,000
1934-35.....	265,000	1928-29.....	300,000

Canadian Millfeed Exports

Exports of bran, shorts and middlings from Canada by crop years, ended Aug. 31, by countries of destination, in cwts (100 lbs). These are the most recent figures since the Canadian government war-time regulations prohibit the publication of statistics revealing exports and countries of destination.

	*1939-40	1938-39	1937-38
United Kingdom.	44,196	663,597	1,047,309
Bermuda	27,694	23,597	25,807
British Guiana ..	969	958	842
British Honduras	2	.....	90
Barbados	410	573	447
Jamaica	1,745	2,588	2,230
Trinidad-Tobago..	134	19	6
Other B. W. I...	811	668	689
Hongkong	5,850	4,020	3,468
Newfoundland ..	27,663	24,991	15,595
New Zealand	.....	28	4
St. Pierre-Miquelon	1,223	1,461	840
United States ...	5,410,739	2,931,858	39,302
Alaska	.....	20	.....
Belgium	.....	.....	10
Fiji Islands	.....	10	.....
China	.....	30	.....
Totals	5,521,446	3,654,418	1,136,639

*Figures for 1939-40 are for crop year ending July 31.

Porto Rican Imports

Imports of grain and grain products, as reported by the United States Bureau of Foreign and Domestic Commerce, from continental United States into Porto Rico, by years ending June 30:

	Wheat flour, bbls	Corn, bus	Corn meal, bbls	Oats, bus
1941*..	326,917	2,397	55,720	50,721
1940...	479,250	22,164	84,637	116,633
1939...	428,065	8,218	61,949	91,932
1938...	458,106	11,105	53,852	120,303
1937...	416,745	24,361	43,505	116,300
1936...	388,466	18,494	82,860	122,670
1935...	373,707	23,179	63,698	128,500
1934...	403,843	43,789	93,662	136,381
1933...	420,105	91,878	115,664	137,268
1932...	385,876	41,046	73,309	120,687
1931...	397,564	12,133	77,524	141,823
1930...	423,320	1,420	91,880	151,074
1929...	512,627	38,735	130,715	197,981
1928...	377,727	179,676	75,398	221,193
1927...	464,384	259,682	134,222	260,747
1926...	392,824	241,775	93,285	266,792

*Because of regulations imposed by war conditions the complete 1940-41 crop year figures are not available.

United Kingdom Domestic Flour Exports*

Exports of domestic flour from the United Kingdom, by calendar years (000's omitted):

	280-lb sacks	196-lb bbls		280-lb sacks	196-lb bbls
1939..	647	924	1927...	1,674	2,480
1938...	842	1,204	1926...	1,615	2,393
1937...	624	892	1925...	2,752	4,077
1936...	942	1,396	1924...	2,552	3,781
1935...	1,037	1,536	1923...	1,562	2,231
1934...	1,157	1,714	1922.....	832	1,188
1933...	1,241	1,838	1921.....	623	890
1932...	1,915	2,839	1920.....	91	127
1931...	1,645	2,438	1919.....	79	110
1930...	1,608	2,384	1918.....	50	70
1929...	1,730	2,564	1917.....	93	130
1928...	1,750	2,593	1916.....	412	576

*Subsequent to April 1, 1923, statistics for the Irish Free State have been omitted.

Because of the war no figures have been published by the government since December, 1939.

United Kingdom Imports*

United Kingdom imports of grain (including flour and meal in terms of grain) for the calendar year 1939, in bushels (000's omitted):

Wheat flour—	Bbls	Pct.
United States	75	1.8
Canada	2,556	61.0
Australia	893	21.3
Other countries	666	15.9
Totals	4,190	100.0
Wheat—	Bus	Pct.
United States	25,312	12.8
Canada	65,642	33.2
Argentina	46,592	23.5
Australia	25,128	12.7
Others	35,336	17.8
Totals	198,010	100.0
Corn—		
United States	15,874	17.1
Roumania	4,808	5.2
Argentina	49,543	53.4
Other countries	22,569	24.3
Totals	92,794	100.0
Barley—		
United States	4,468	14.5
Canada	7,972	25.9
Other countries	18,336	59.6
Totals	30,776	100.0
Oats—		
Canada	4,870	94.8
Argentina	160	3.1
Other countries	100	2.1
Totals	5,130	100.0

*The government has published no figures since 1939 because of the war.

United Kingdom Exports and Imports*

Imports and exports of grain (including flour and meal in terms of grain) for the calendar year 1939, in bushels (000's omitted):

	Imports	Exports
Wheat	217,602	5,640
Corn	107,477	4,465
Barley	38,776	56
Oats	5,352	207

*The government has published no figures since 1939 because of the war.

Arabians are fond of a type of bread that resembles sheets of chamois leather. It is made of flour and raisin syrup and is baked by the direct rays of the sun. It dates back to an era long before the days of Pontius Pilate. The bread is flexible and will not crumble and is carried all over Asia on camel back to be served as a sweet or dessert with fine Arabian Mocha coffee.

Average Native Wheat Price in England

Average yearly prices for wheat in England, per quarter of 480 lbs and per bushel of 60 lbs:

	Per qr £ s d	Per bu		Per qr £ s d	Per bu
1941.	3 2 10	$1.88½	1909.	1 16 11	$1.10¾
1940.	2 3 4	1.30	1908.	1 12 2	0.96½
1939.	1 1 8	0.65	1907.	1 10 7	0.90⅞
1938.	1 9 3	0.87¾	1906.	1 8 4	.85
1937.	2 0 2	1.20½	1905.	1 9 9	.89¼
1936.	1 11 1	0.93¼	1904.	1 8 4	.85
1935.	1 2 5	0.67¼	1903.	1 6 9	.80¼
1934.	1 0 8	0.62	1902.	1 8 1	.84¼
1933.	1 2 11	0.68¾	1901.	1 6 10	.80½
1932.	1 5 4	0.76	1900.	1 6 11	.80¾
1931.	1 4 6	0.73½	1899.	1 5 9	.76⅞
1930.	1 14 4	1.03	1898.	1 14 2	1.02½
1929.	2 2 5	1.27¼	1897.	1 10 3	.90¾
1928.	2 3 2	1.29½	1896.	1 6 3	.78¾
1927.	2 9 4	1.48	1895.	1 3 1	.69¼
1926.	2 13 3	1.60	1894.	1 2 11	.68¾
1925.	2 12 4	1.57	1893.	1 6 4	.79
1924.	2 9 5	1.48¼	1892.	1 10 4	.91
1923.	2 2 4	1.27	1891.	1 17 2	1.11½
1922.	2 7 9	1.43¼	1890.	1 11 9	.95¼
1921.	3 11 11	2.15¾	1889.	1 9 9	.89¼
1920.	4 0 9	2.42¼	1888.	1 11 10	.96⅝
1919.	3 12 11	2.18¾	1887.	1 12 6	.98⅜
1918.	3 12 9	2.18¼	1886.	1 11 1	.94⅜
1917.	3 16 8	2.30	1885.	1 12 10	.99¾
1916.	2 18 3	1.74½	1884.	1 15 9	1.08⅝
1915.	2 13 0	1.59	1883.	2 1 7	1.26¼
1914.	1 15 1	1.05¼	1882.	2 5 1	1.36⅞
1913.	1 11 8	.95	1881.	2 5 4	1.37¾
1912.	1 14 9	1.03½	1880.	2 4 4	1.34⅝
1911.	1 11 9	.95¼	1879.	2 3 10	1.33⅛
1910.	1 11 8	.95	1878.	2 6 5	1.41

British Flour and Bread Regulations

From March 23, 1942, British millers were ordered by the Ministry of Food to cease making white flour and to mill an 85% extraction flour only. For some time prior to that date the milling ratio for white flour had been 75%.

From April 6, 1942, white bread was prohibited in Great Britain and a loaf consisting of three parts national wheatmeal (85% extraction flour) and one part white flour was prescribed. The same ratio was made effective with respect to biscuits, cakes, buns and all confectionery in which flour is used.

Owing to suspension of the manufacture of white flour, vitaminization or flour fortification was suspended, as the national wheatmeal flour requires no enrichment with vitamin B_1.

On and after March 23 no miller, importer or factor was permitted to deliver any white flour to any person other than a licensed commercial baker, who at the same time must take three times the quantity in national wheatmeal.

MILLERS

We are familiar with your requirements and are able to give you not only the best woven cotton belting but intelligent service. Hundreds of millers insist on the following products:

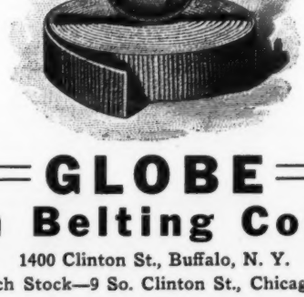
GLOBE
Solid Woven Cotton Belting
Saves you money because of that extra wear.

GLOBE
Kanry-Tex Belting
Another Globe development—ideal for conveying sacks, cereals, etc. Can be washed with hot water or live steam. Stays clean and free from contamination—will not transfer taste or odor to food products.

GLOBE
Wet Grain Brand Belting
Ends wet wheat leg troubles—a special process renders the belt practically impervious to moisture or to the acid set up by wet wheat.

GLOBE
Sifter Brush Stock
Styles No. 809, 1010 and 2" 4 Double. Put up in rolls or packed 100 (3") brushes to the box—complete with buttons.

We'll gladly send you samples, as well as names of Globe Distributors



GLOBE
Woven Belting Company
1400 Clinton St., Buffalo, N. Y.
Branch Stock—9 So. Clinton St., Chicago, Ill.

A Trade Association Roster

MILLING

American Association of Cereal Chemists

President, Charles N. Frey, Fleischmann Laboratories, New York City; vice president, James M. Doty, Merck & Co., Omaha, Neb; secretary, Harry Obermeyer, Merck & Co., Rahway, N. J; treasurer, Perie Rumold, Standard Milling Co., Inc., Kansas City, Mo.

American Corn Millers Federation

President, J. J. Mullen, General Foods Corp., Kankakee, Ill; first vice president, Karl Juve, Kellogg Sales Co., Battle Creek, Mich; second vice president, C. R. Martin, Quaker Oats Co., St. Joseph, Mo; secretary, Harry Hunter, 1828 Morrison Hotel, Chicago, Ill; treasurer, R. C. Huth, C. A. Krause Milling Co., Milwaukee, Wis.

American Millers Association

President, R. S. Robertson, Ewing Mills, Ewing, Ind; vice president, Henry Glass, Williamstown (Ky.) Roller Mills; secretary-treasurer, Miss L. V. (Peggy) Perdue, 206 First National Bank Building, Marion, Ind.

Associated Millers of Kansas Wheat

President, Jess B. Smith, 1212 Board of Trade, Kansas City, Mo.

Association of Operative Millers

President, Horace G. Kohler, Fuhrer-Ford Milling Co., Mount Vernon, Ind; vice president, Carl Grier, General Mills, Inc., Minneapolis, Minn; secretary, W. E. McCraith, Board of Trade Building, Kansas City, Mo; treasurer, Herman H. Trapp, Russell-Miller Milling Co., Minneapolis, Minn.

The Buckwheat Association

President, George V. Dayton, Towanda, Pa; secretary-treasurer, P. G. Schumacher, Cohocton, N. Y.

Central New York Millers Association

Chairman, Fred M. White, Victor Flour Mills, Inc., Pittsford, N. Y; vice chairman, Walter Anderson, Finger Lakes and Hudson Flour Mills, Inc., Geneva, N. Y; secretary-treasurer, Wendell T. Matthews, Larrowe Buckwheat Flour Corp., Cohocton, N. Y.

Michigan Millers Association

President, L. O. Bracy, Amendt Milling Co., Monroe; vice president, William C. Doyle, King Milling Co., Lowell; secretary, Clarence L. Athanson, Commercial Milling Co., Detroit; treasurer, J. A. Porter, Valley City Milling Co., Portland.

Mid-West Millers Association

President, Don Bridge, Norfolk (Neb.) Cereal & Flour Mills Co; vice president, Guy Grimes, Beaver Valley Milling Co., Des Moines, Iowa; secretary, Tom Wright, Wright Bros. Flour Mills, Brainard, Neb; treasurer, William Vanderheiden, Humphrey (Neb.) Mills.

Millers National Federation

President, Willis C. Helm, Russell-Miller Milling Co., Minneapolis; vice president and Washington representative, Herman Fakler, 847 National Press Building, Washington, D. C; vice president and secretary in charge of the main office, Herman Steen, 309 West Jackson Boulevard, Chicago, Ill; treasurer, Francis A. Smith, Millers National Federation, Chicago, Ill.

Minnesota Flour Mill Accountants

President, Miles A. Lea, Russell-Miller Milling Co., Minneapolis; vice president, J. R. McNamara, Pillsbury Flour Mills Co., Minneapolis; secretary, A. V. Woodbury, King Midas Flour Mills, Minneapolis.

Missouri Millers Association

President, Henry Cowgill, Jr., Cowgill Flour Mills, Carthage; vice president, Harry B. Bolte, Slater Mill & Elevator Co., Slater; secretary, A. J. Leber, Boatman's Bank Building, St. Louis; treasurer, Paul V. Dulle, G. H. Dulle Milling Co., Jefferson City.

Mutual Millers and Feed Dealers Association

President, Grover M. Town, Town's Mill, Forestville, N. Y; vice president, Frank Schrimper, Schrimper Bros., Belle Valley, Pa; secretary-treasurer, Lewis Abbott, Richardson Milling Co., Hamburg, N. Y.

National Soft Wheat Millers Association

President, J. B. Allen, Allen Bros. Milling Co., Columbia, S. C; vice presidents, W. C. Doyle, King Milling Co., Lowell, Mich., and Harold S. Pfeffer, Pfeffer Milling Co., Lebanon, Ill; secretary, W. H. Strowd, 610 Exchange Building, Nashville, Tenn.

New England Millers and Shippers Association

President, George C. Bailey, Montpelier, Vt; vice president, Daniel Polsky, Norwich, Conn; secretary-treasurer, A. F. Hopkins, room 714, 177 Milk Street, Boston, Mass.

New York State Millers Association

President, Joseph W. Ward, William Hamilton & Son Co., Caledonia, N. Y; vice president, W. A. Clark, Birkett Mills, Penn Yan, N. Y; treasurer, H. L. Woods, Woods-Sprague Milling Co., Albion, N. Y; secretary, W. E. Maloney, Corn Exchange of Buffalo, Buffalo, N. Y.

North Pacific Millers Association

President, Philip I. Welk, Preston-Shaffer Milling Co., Walla Walla, Wash; vice president, Moritz Milburn, Centennial Flouring Mills Co., Seattle, Wash; secretary-treasurer, George V. Hayes, Lewis Building, Portland, Oregon.

Northwest Spring Wheat Millers Club

President, G. S. Kennedy, General Mills, Inc., Minneapolis, Minn; secretary-treasurer, W. H. Heegaard, Russell-Miller Milling Co., Minneapolis, Minn.

Ohio Millers State Association

President, P. A. Lashley, Marion Milling Co., Marion; vice president, A. C. Evans, Evans Flour Mills, Galion; secretary-treasurer, R. S. Willcox, 420 Arden Road, Columbus.

Oklahoma Millers Association

President, Edwin N. Humphrey, Chickasha (Okla.) Milling Co; vice president, Raymond Kroutil, Yukon (Okla.) Mill & Grain Co; secretary, Paul T. Jackson, Insurance Building, Oklahoma City; treasurer, J. L. Yergler, Acme Flour Mills Co., Oklahoma City.

Pennsylvania Millers and Feed Dealers Association

President, H. A. Menchey, Lancaster; vice president, S. H. Rogers, Washington, D. C; secretary, Professor H. C. Knandel, Poultry Husbandry, State College, Pa.

Piedmont Millers Association

President, W. A. Henderson, Henderson Roller Mills, Monroe, N. C; first vice president, W. R. Sutherland, Laurinburg (N. C.) Milling Co; second vice president, H. H. Gillum, T. O. Gillum & Co., Madison Mills, Va; secretary-treasurer, S. F. Poindexter, P. O. Box 179, Richmond, Va.

St. Louis Millers Club

President, Andrew Baur, Baur Flour Mills Co; vice president, L. C. Chase, Valier & Spies Milling Corp; secretary-treasurer, Walter J. Krings, 220 Merchants Exchange Building, St. Louis.

Southeastern Millers Association

President, Norman Christley, Columbia (Tenn.) Mill & Elevator Co; first vice president, M. W. Fuhrer, Fuhrer-Ford Milling Co., Mount Vernon, Ind; second vice president, J. W. Ring, Roanoke City Mills, Roanoke, Va; secretary-treasurer, Ralph H. Missman, Sunnyside Milling Co., Box 395, Evansville, Ind.

Southern Illinois Millers Association

President, J. L. Muenter, Muenter Bros., Nashville; vice president, Harold S. Pfeffer, Pfeffer Milling Co., Lebanon; secretary-treasurer, J. L. Grigg, Sparta.

Southern Minnesota Mills

President, W. B. Webb, Wabasha Roller Mill Co., Wabasha; vice president, Charles T. Silverson, Eagle Roller Mill Co., Minneapolis; secretary-treasurer, Martin F. Smith, Midland Bank Building, Minneapolis.

Western Colorado Millers and Feed Dealers Association

President, Louis Berthod, Glenwood Mill, Glenwood Springs; first vice president, A. J. Obert, Delta Mill, Delta; second vice president, H. E. Lague, Monte Vista Mill, Monte Vista; secretary-treasurer, Lloyd N. Case, Montrose Mill, Montrose.

FLOUR

Baltimore Association of Flour Distributors

President, George E. Case; vice president, Charles W. Cowan; secretary, Charles Minnigerode, 216 East Lexington Street; treasurer, Stanley G. Erdman.

Buffalo Flour Club

President, F. A. McLellan, Co-operative G. L. F. Mills, Inc; vice president, Dennis C. Liles, Terminals & Transportation Corp; secretary-treasurer, G. W. Du Rant, Continental Grain Co.

Chicago Association of Flour Distributors

President, David D. Vaughan, Bemmels-Vaughan; vice president, E. S. Wagner, Wagner-Reget Co; secretary-treasurer, S. O. Werner, 166 West Jackson Boulevard.

Chicago Flour Jobbers Exchange

President, Walter N. Marsh, Pillsbury Flour Mills Co; vice president, J. T. Shuflitowski, Joseph T. Shuflitowski Co; secretary-treasurer, Fred H. Brinkman, General Mills, Inc., 400 West Madison.

Cincinnati Association of Flour Distributors

President, Joseph B. Seep, King Midas Flour Mills; vice president, John Sheriff, Joseph Taylor & Sons; secretary-treasurer, George A. Nieman, Nieman & Nieman, 405 Provident Bank Building.

Cleveland Flour Club

President, Franklin E. Martens, Martens Distributing Co; vice president, Aaron Sheinbart, Aaron Sheinbart Flour Co; secretary, Crut Liebert, Commercial Milling Co., 463 Hippodrome Annex; treasurer, W. E. Pittsley, Montana Flour Mills Co.

National Association of Flour Distributors

President, A. J. Palermo, John E. Koerner & Co., New Orleans, La; vice president, Frank T. Herbert, Johnson-Herbert & Co., Chicago, Ill; second vice president, James R. Affleck, Quaker City Flour Mills, Philadelphia, Pa; secretary-treasurer, Wayne G. Martin, Jr., 23 Beaver Street, New York City.

National Macaroni Manufacturers Association

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President, Charles Voelkel, Schwartz & Voelkel, Illinois Central Warehouse; vice president, Emile Alt, Orleans Flour Co; secretary-treasurer, A. J. Palermo, John E. Koerner & Co., 781 LaSalle Street.

New York Association of Flour Distributors

President, S. R. Strisik, S. R. Strisik Co., New York City; vice president, Harvey Landau, Harvey Landau, Inc., New York City; secretary, Wayne G. Martin, Jr., 23 Beaver Street, New York City; treasurer, Fred W. Colquhoun, 45 West 45th Street, New York City.

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Pittsburgh Flour Club

President, E. J. Bermel; vice president, E. M. Peek; secretary, C. C. Latus, 60 Methodist Building, 524 Penn Avenue; treasurer, V. M. Wintermantel.

St. Louis Flour Club

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Wisconsin Flour and Bakers Allied Trades Association

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FEED AND GRAIN

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Association of Southern Feed Control Officials

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California Hay, Grain and Feed Dealers Association

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Central Retail Feed Association

President, Paul Gebhart, Lincoln Mills, Merrill, Wis; vice president, Fred H. Pittelkow, H. P. Schmidt Milling Co., Oshkosh, Wis; secretary-treasurer, B. J. Logan, Westby Feed & Seed, Westby, Wis; executive secretary, David K. Steenbergh, 741 North Milwaukee Street, Milwaukee, Wis.

Eastern Federation of Feed Merchants

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Farmers' Co-operative Grain Dealers Association of Oklahoma

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Farmers Grain Dealers Association of Iowa

President, Oscar Heline, Marcus; vice president, William H. Yungclas, Webster City; secretary, Don E. Edison, Fort Dodge.

Georgia Feed Manufacturers Association

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Illinois Grain Dealers Association

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Indiana Grain Dealers Association

President, C. T. Wilson, Sulphur Springs; vice president, H. E. Miller, Bainbridge; secretary, Fred K. Sale, 600 Board of Trade Building, Indianapolis; treasurer, D. G. Phillips, Indianapolis.

Kansas City Feed Club

President, L. J. Flora, Larabee Flour Mills Co; vice president, Earl A. Hogan, Henry Lichtig & Co; secretary, Eugene L. Selders, Spear Mills, Inc; treasurer, R. O. Foster, Morton Salt Co.

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Michigan Bean Shippers Association

President, L. D. Cline, Saginaw; first vice president, C. H. Estee, Shepherd; second vice president, H. E. Henne, Bay Port; secretary, A. E. Walcott, 401 Eddy Building, Saginaw.

Mineral Feed Manufacturers Association

President, J. S. Ahern, Moorman Mfg. Co., Quincy, Ill; vice president, James L. Elliott, Oelwein (Iowa) Chemical Co; secretary-treasurer, M. E. Gray, Moorman Mfg. Co., Quincy, Ill.

Minneapolis Grain Shippers Association

President, A. G. Hessburg, Hiawatha Grain Co; vice president, Arthur J. Larsen, Atwood-Larson Co; secretary-treasurer, H. W. Abrahams, Victoria Elevator Co.

National Grain Trade Council

Chairman, F. Peavey Heffelfinger, Monarch Elevators, Division of F. H. Peavey & Co., Minneapolis, Minn; vice chairman, J. F. Leahy, Clay-Leahy Grain Co., Board of Trade, Kansas City, Mo; executive secretary, R. B. Bowden, 414 Merchants Exchange, St. Louis, Mo; treasurer, Roger P. Annan, St. Louis, Mo.

National Hay Association

President, G. R. Bridge, Chicago, Ill; first vice president, H. A. Desautels, New Bedford, Mass; second vice president, Mrs. Martha S. Calkins, Chelsea, Okla; secretary-treasurer, Fred K. Sale, 600 Board of Trade, Indianapolis, Ind.

Nebraska Grain Improvement Association

President, A. G. Ellick, Omaha; vice president, Harry E. Dickinson, Omaha; secretary, Glen H. LeDioyt, Lincoln; treasurer, Ray R. Ridge, Omaha.

New York State Hay and Grain Dealers Association

President, D. Clifford Jones, Tudor & Jones, Weedsport, N. Y; vice president, James H. Gray, Gray Milling, Springville, N. Y; secretary-treasurer, Sheldon D. Dunlap, Buffalo and Syracuse, N. Y.

North Dakota Farmers Grain Dealers Association

President, Walter Albright, Bonetrail; vice president, John Jones, Garske; secretary-treasurer, C. H. Conoway, Fargo; assistant secretary-treasurer, Leonora Ronning, Fargo.

Northeastern Feed Manufacturers Association

President, E. J. Koehlein, Allied Mills, Inc., Buffalo, N. Y; first vice president, Arthur Hopkins, Charles M. Cox Co., Boston, Mass; second vice president, P. Chichester, Dietrich & Gambrill, Inc., Frederick, Md; secretary-treasurer, Bruce Conover, Jr., Maritime Milling Co., Buffalo, N. Y.

Northwest Country Elevator Association

President, Howard I. McMillan, Osborne-McMillan Elevator Co., Minneapolis, Minn; vice president, Robert G. Cargill, Victoria Elevator Co., Minneapolis, Minn; secretary-treasurer, Major L. C. Webster (on leave for army service).

Northwestern Feed Manufacturers and Distributors Association

President, D. A. Williams, Minnesota Farm Bureau Service Co., South St. Paul, Minn; vice presidents, Stan Nelson, Northrup, King & Co., Minneapolis, Minn; L. H. Patten, Farmers & Merchants Milling Co., Glencoe, Minn; Willard Lighter, Cargill, Inc., Minneapolis; secretary-treasurer, S. N. Osgood, Fruen Milling Co., Minneapolis, Minn.

Northwest Retail Feed Association

President, W. L. Ledin, Bethel Feed & Produce Co., Bethel, Minn; vice president, Joseph E. Donovan, Donovan Grain & Fuel Co., Albert Lea, Minn; secretary, W. D. Flemming, 408 South Third Street, Minneapolis, Minn.

Ohio Farmers Grain Dealers Association

President, Alfred P. Eier, Nevada; first vice president, O. J. Jeffrey, Paulding; second vice president, A. C. Patzer, Grove City; secretary, C. S. Latchaw, Defiance.

Ohio Grain, Mill & Feed Dealers Association

President, L. G. Bradstock, Farmers Grain & Milling Co., Wellington; first vice president, Elton Kile, Kile & Son, Kileville; second vice president, H. E. Frederick, Marysville; secretary-treasurer, W. W. Cummings, 30 East Broad Street, Columbus.

Oklahoma Grain & Feed Dealers Association

President, Dale Johnston, Enid; vice president, E. S. Bouldin, Muskogee; secretary-treasurer, E. R. Humphrey, P. O. Box 804, Enid.

Oregon Feed Dealers Association

President, Dan Hogan, Albers Milling Co., Portland; vice president, Gordon Burlingham, Burlingham & Sons, Forest Grove; secretary, Leon Jackson, 308 S. W. Stark Street, Portland; treasurer, Hugh Stoll, H. J. Stoll & Sons, Portland.

Pacific Northwest Feed Association, Inc.

President, Lorin Markham, Yakima, Wash; vice president, Barney Rindal, Poulsbo, Wash; secretary-treasurer, Arthur Nelson, Renton, Wash; manager, John Wilson, Seattle, Wash.

Pacific Northwest Grain Dealers Association, Inc.

President, Harry Morrison, Morrison Grain Co., Walla Walla, Wash; vice president, J. Glover, Spokane, Wash; secretary, Ted Brasch, 343 Peyton Building, Spokane, Wash; treasurer, George Schultz, Reardan, Wash.

Panhandle Grain & Feed Dealers Association

President, E. C. Shuman, White Deer, Texas; vice president, Robert Stone, Clovis, N. M; secretary-treasurer, Joe S. Morris, P. O. Box 1969, Amarillo, Texas.

St. Louis Grain Club

President, R. H. Baumgartner, R. H. Baumgartner & Co; vice president, Julius Schuermann, Producers Grain Commission Co; secretary-treasurer, W. B. Christian, I. M. Simon & Co.

Society of Grain Elevator Superintendents

President, Paul Christensen, Van Dusen Harrington Co., Minneapolis, Minn; first vice president, Gilbert P. Lane, Arcady Farms Milling Co., Chicago, Ill; second vice president, R. B. Pow, Reliance Grain Co., Ltd., Fort William, Ont; secretary-treasurer, Dean M. Clark, Board of Trade Building, Chicago, Ill.

Southern Mixed Feed Manufacturers Association

President, A. T. Pennington, Allied Mills, Inc., Atlanta, Ga; vice president, Ben Williamson, Williamson Feed Mills, Jacksonville, Fla; acting secretary, A. T. Pennington, Allied Mills, Inc., Atlanta, Ga; treasurer, J. B. Edgar, Happy Mills, Inc., Memphis, Tenn.

Texas Feed Manufacturers Association

President, W. W. Bridges, Bewley Mills, Fort Worth; vice president, R. W. Bridges, Purina Mills, Fort Worth; secretary-treasurer, L. E. Church, Houston Milling Co., Houston.

Texas Grain & Feed Dealers Association

President, Warren Howard, Dallas; vice president, E. G. Barks, Tulia; secretary-treasurer, A. G. Campbell, 1925 Fair Building, Fort Worth.

Western Grain and Feed Association

President, Harry J. Dean, Iowa City, Iowa; secretary, Gradon Swanson, Des Moines, Iowa; treasurer, Walter Berger, Des Moines, Iowa.

BAKING

Allied Trades of the Baking Industry

President, F. J. Bergenthal, Red Star Yeast & Products Co., Milwaukee, Wis; vice president, Mort Unger, The Unger Co., Cleveland, Ohio; secretary-treasurer, Claude A. Bascombe, Standard Brands, Inc., New York City.

American Bakers Association

Chairman, Grover C. Patton, Decatur, Ill; president, L. J. Schumaker, Philadelphia, Pa; first vice president, Louis Garttner, Madison, Wis; second vice president, Joseph Hexter, Atlanta, Ga; secretary, Tom Smith, 1135 Fullerton Avenue, Chicago, Ill; treasurer, M. Lee Marshall, New York City.

American Bakers Foundation

Chairman, G. R. Williams, Scranton, Pa; vice chairman, Joseph A. Lee, New York City; secretary, Tom Smith, 1135 Fullerton Avenue, Chicago, Ill; treasurer, M. Lee Marshall, New York City.

American Institute of Baking

Chairman and president, L. J. Schumaker, Philadelphia, Pa; vice chairman, Louis E. Caster, Rockford, Ill; secretary, Tom Smith, 1135 Fullerton Avenue, Chicago; treasurer, M. Lee Marshall, New York City.

American Society of Bakery Engineers

President, William F. Gossadge, Grocers Baking Co., Louisville, Ky; first vice president, W. H. Geller, John R. Thompson Co., Chicago, Ill; second vice president, F. J. Coughlin, Procter & Gamble, Ivorydale, Ohio; secretary-treasurer, Victor E. Marx, 1541 Birchwood Avenue, Chicago, Ill.

Associated Bakers of Illinois

President, Walter H. Kurth, Minier; wholesale vice president, Robert D. Bills, Mattoon; retail vice president, Paul W. Zickgraff, Peoria; secretary, Wilmoth C. Mack, 112 West Randolph Street, Chicago; treasurer, Grover C. Patton, Decatur.

Associated Bakers of Minneapolis

President, L. E. Christman; vice president, W. H. Manning; secretary, J. M. Long, 1310 Eighth Street SE; treasurer, Charles Durham.

Associated Bakers of Minnesota

President, Alois Eibner, New Ulm; vice president, C. G. Krause, Minneapolis; financial secretary, A. J. Munn, St. Paul; secretary, J. M. Long, 1310 Eighth Street S.E., Minneapolis; treasurer William B. Thompson, Minneapolis.

Associated Retail Bakers of America

President, Jack Koenig, Jr., Koenig's Bakeries, Chicago, Ill; first vice president, Charles W. Koch, Koch's Bakery, St. Louis, Mo; second vice president, John Benkert, Benkert's Bakery, Long Island City, N. Y; third vice president, Albert Wiehn, Wiehn's Bakery, Cleveland, Ohio; secretary and director, research and merchandising department, Frank G. Jungewaelter, 1135 Fullerton Avenue, Chicago, Ill; treasurer, Chester T. Smidowicz, Smidowicz Bakery, Chicago, Ill.

Bakers Association of the Carolinas

President, M. J. Paschall, Durham, N. C; vice presidents, R. H. Jennings, Jr., Orangeburg, S. C., and James H. Thompson, Statesville, N. C; secretary-treasurer, Harvey Williamson, Durham Baking Co., Durham, N. C.

Bakers Association of South Dakota

President, A. B. Johnson, Yankton; vice president, Hugh Brown, Brookings; secretary-treasurer, Leland Hopkins, Redfield.

Bakers Club, Inc., New York

President Hyman Waitzman, Purity Bakeries Corp., New York City; first vice president, Richard F. Meyer, Jersey Bread Co., Paterson, N. J; second vice president, Frank X. Ragan, Anheuser-Busch, Inc., New York City; secretary, Frank A. Lyon, Hotel Shelton, New York City; treasurer, Ernest B. Keirstead, Yonkers, New York.

Bakers Club of Baltimore

President, John Ruthke, New System Bakery; vice president, James J. Nau, Nau's Bakery; secretary, Benn. S. Hillegas, Anheuser-Busch, Inc; treasurer, Anton Hagel, Hagel's Bakery; counsel, P. August Grill.

Bakers Club of Chicago

President, L. A. Williamson, Grennan Bakeries, Inc; vice president, C. J. Burny, Burny Bros., Inc; second vice president, Vernon C. Usher, Bowman Dairy Co; treasurer, Thomas A. Dillon, Edward Katzinger Co; secretary, Wilmoth C. Mack, 112 W. Randolph Street.

Bakers' Club of Philadelphia

President, R. E. Weaver, 3701 North Broad Street; first vice president, William Oldach; second vice president, Frank VirNelson; secretary, Francis M. Hawkins, 20th and Venango streets; assistant secretary, C. F. Sharpless; treasurer, D. C. Wiley, 21st and Arch streets.

Bakers Courtesy Club of Pittsburgh

President, Daniel F. Langdon, Anheuser-Busch, Inc; first vice president, R. T. Hambleton, Washburn Crosby Co; second vice president, J. J. Mussman, Red Star Yeast Co; secretary, E. Willard Moore, Thomas M. Royal & Co; treasurer, Chris F. Bauer, Bear-Stewart Co.

Bakers of Washington, Inc.

President, O. M. Sheppard, Bellingham (Wash.) Baking Co; first vice president, Wallace Macpherson, Tacoma; second vice president, D. S. Robinson, Seattle; secretary, Lemma Van Hoeter, Seattle; treasurer, George Buchan, Seattle.

Bakery Equipment Manufacturers Association

President, W. Clark Dean, Union Steel Products Co., Albion, Mich; vice president, C. W. Steinhauer, Micro Westco, Inc., Bettendorf, Iowa; secretary, Fred D. Pfening, 1075 West Fifth Avenue, Columbus, Ohio.

Bakery Sales Association

President, Fred L. Cobb, Cobb's Sunlit Bakery, Green Bay, Wis; executive vice president, L. B. Steele, E. I. DuPont de Nemours & Co., Wilmington, Del; vice president, Basil Cimaglio, Centrella Bakery, Chicago, Ill; secretary, Fred H. Laufenburg, 2918 North Farwell Avenue, Milwaukee, Wis.

Bakery Technicians of America

President, Orville J. Pickens; vice president, William Walmsley; secretary-treasurer, H. G. Brouillett, 221 North La Salle Street, Chicago, Ill.

Baltimore Retail Bakers Association

President, George W. Beck, 3443 Edmondson Avenue, vice president, Ernst Uebersax, 2700 Fenwick Avenue; secretary, Carl Reinhardt, 815 Scott Street; treasurer, Anton Hagel, 1751 East Pratt Street.

Biscuit and Cracker Manufacturers Association of America

President, W. P. Sharp, Joplin, Mo; vice presidents, A. P. Strietmann, Cincinnati, Ohio; Hanford Main, Long Island City, N. Y; Frank H. Montgomery, New York, N. Y; secretary-treasurer, R. T. Stokes, 233 Broadway, New York City.

Buffalo Master Bakers Association

President, Henning Mortenson; vice president, George Cavanaugh; secretary, W. A. Steller, 845 East Delaven Avenue; treasurer, William Hilger.

Chicago Bakers Courtesy Club

President, Arthur W. Fosdyke; first vice president, Dr. L. A. Rumsey; second vice president, P. E. Minton; secretary-treasurer, S. O. Werner, 166 West Jackson Boulevard.

Connecticut Bakers Association

President, Hudson F. Weigold, Connecticut Doughnut Co., Mount Carmel; vice president, Fred Wolfe, Jr., Wolfe's Quality Bakery, East Haven; secretary, Charles B. Barr, 932 Griffin Place, Stratford; treasurer, Leon A. McDonald, De Laurent Bake Shop, Bridgeport.

Georgia Bakers Council

President, E. P. Cline, Colonial Baking Co., Columbus; vice president, P. R. Nugent, Nugent's Bakery, Savannah; secretary, C. M. McMillan, Atlanta; treasurer, Horace Small, Small & Estes Bakery, Gainesville, Ga.

Holes-in-Bread Club

President, Robert W. Brooks, Standard Brands, Inc., New York; vice president and program chairman, Arthur Hackett, Drake Bakeries, Inc., Brooklyn; secretary-treasurer, Charles A. Barnes, Bakers' Helper, New York.

Independent Bakers Association of Texas

President, L. Self, Terrell; vice president, J. C. Kendall, Vernon; secretary-treasurer, O. J. Wagenfuehr, Jr., Temple; executive secretary, Mrs. Alice Whitehead, Temple.

Independent Master Bakers Association of Ontario

President, W. Bunting, Charlie's Yeast Donuts, Toronto, Ont; vice presidents, George Shewfelt, Kincardine, Ont; G. E. Thompson, Belleville, Ont; T. A. Sedgwick, Toronto, Ont; secretary, Charles H. Carter, Carter Family Bakery, Bowmanville, Ont.

Indiana Bakers Association

President, Noble Barnett, Hi-Class Bakery, Evansville; vice president, Gar Fairly, Holsum Bakery, Fort Wayne; treasurer, Morris Jones, Dietzen's Bakery, Richmond; secretary-manager, Charles P. Ehlers, 924 Peoples Bank Building, Indianapolis.

Iowa Bakers Association

President, Claude Phillips, Webster City; vice president, Ed Haglund, Davenport; secretary, George F. Brems, Cedar Rapids; treasurer, Joseph Brower, Sheldon.

Kentucky Master Bakers Association

President, E. A. Cassidy, Covington; vice president, Elmer Neudecker, Louisville; secretary, Godfrey Elsaesser, Covington; treasurer, Jacob Nill, Louisville.

Maine Bakers Association

President, Walter F. Willey, Harris Baking Co., Waterville; vice president, Philippe J. Couture, Maine Baking Co., Auburn; secretary, Philip D. Tingley, Tingley's Bakery, Houlton; treasurer, Legis Le Page, Le Page Baking Co., Lewiston.

Michigan Bakers Allied Trades Association

President, Willard H. Hagenmeyer, Commercial Milling Co., Detroit; vice president, L. C. Kowalski, F. W. Stock & Son, Detroit; secretary-treasurer, Charles L. Niles, 1601 Howard Street at Tenth, Detroit.

Michigan Bakers Association

President, Sherman D. Berdan, Berdan Bread Co., Bay City; first vice president, Bernard E. Godde, Godde Pastry Shop, Battle Creek; second vice president, Clayton G. Ovaitt, Ovaitt Bakery Corp., Midland; secretary, Charles J. Milke, 850 Detroit Leland Hotel, Detroit; treasurer, William H. Hines, Procter & Gamble, Detroit.

Milwaukee Master Bakers Association

President, Kurt O. Kaiser; vice president, George Paepke; financial secretary, Carl Pritzlaff; corresponding secretary, Nic J. Schmidt; treasurer, Arthur Krumbiegel.

Missouri Master Bakers Association

Acting president, Charles W. Koch, St. Louis; first vice president, Joel Wayland, Columbia; second vice president, Elmer McGee, Mexico; third vice president, E. Knaus, St. Louis; secretary, Irvin Gintz, 4614 Bessie Avenue, St. Louis; treasurer, Frank Staedtler, St. Joseph.

National Bakers Supply House Association

President, Paul Chapman, Chapman & Smith Co., Chicago, Ill; vice president, Walter Seidel, Ad. Seidel & Sons, Chicago, Ill; secretary, Gerald B. Henry, Henry & Henry, Inc., Buffalo, N. Y; treasurer, T. F. Naughtin, T. F. Naughtin Co., Omaha, Neb.

Nebraska Master Bakers Association

President, Victor Wendelin, Wendelin Baking Co., Lincoln; vice president, Harold Gillan, Gillan Baking Co., York; secretary, T. F. Naughtin, Jr., T. F. Naughtin Co., Omaha; treasurer, Lawrence F. Ortman, Ortman Bakeries, Omaha.

New England Bakers Association

President, William F. Goodale, Jr., Roxbury, Mass; vice president, John D. Dickson, Brockton, Mass; secretary, Robert E. Sullivan, 51 Exeter Street, Boston, Mass; treasurer, Guy Maynard, Standard Brands, Inc., Cambridge, Mass.

New Orleans Master Bakers Association

President, Alois J. Binder, Joseph Binder Bakery, Inc; vice president, William C. Bacher, Bacher Bros. Bakery; secretary-treasurer, Sidney Baudier, Jr., 401 Board of Trade Building.

New York State Association of Manufacturing Retail Bakers

President, John Benkert, Benkert's Bakery, Long Island City; first vice president, William Schonleber, Aunt Jennie's Bake Shop, Rochester; second vice president, Lawrence H. Miller, Miller's Bakery, Buffalo; third vice president, George Cron, Cron Bros. Bakery, Jamaica; secretary, Albert W. Speers, Preston Bakery Shop, Albany; treasurer, Walter G. Bauer, Bauer's Bakery, Brooklyn.

North Dakota Bakers Association

President, P. D. Maughan, Dutch Maid Bakery, Fargo; vice president, Paul Breen, Bon Ton Bakery, Dickinson; secretary-treasurer, R. O. Miller, Miller's Bakery, Valley City.

Ohio Bakers Association

President, Ralph Osborn, Cottage Baking Co., Piqua; vice president, Albert F. Troesch, Al Troesch Bakery, Cleveland; secretary, Roy Ferguson, 829 West Broad Street, Columbus; treasurer, Fred Allen, Donaldson Baking Co., Columbus.

Ohio River Valley Bakers Club

President, Paul Sayre, Storck Baking Co., Gallipolis; vice president, T. E. Ridgeway, Oak Hill; secretary-treasurer, John Mootz, Mootz Bakery, Gallipolis.

Oklahoma Bakers Association

President, Alvin Kruse, Wigwam Baking Co., Tulsa; vice president, Ferd Denner, Denner Golden Krust Baking Co., Enid; secretary-treasurer, John W. Wallen, Maywood Baking Co., Oklahoma City.

Pennsylvania Bakers Association

President, L. J. Dudt, Dudt's Bakery, Pittsburgh; vice president, William E. Maier, Maier's Bakery, Reading; secretary, Harold E. Snyder, 5700 North Broad Street, Philadelphia; treasurer, David C. Wiley, Philadelphia.

Potomac States Bakers Association

President, J. Arthur Nolde, Richmond, Va; vice presidents, Philip Hauswold, Baltimore, Md; A. L. Hudson, Georgetown, Del; L. E. Duncan, Norfolk, Va; Paul G. Sayre, Parkersburg, W. Va; secretary, Emmet Gary, 16 McClellan Place, Baltimore, Md; treasurer, Anton Hagel, Baltimore, Md.

Rocky Mountain Bakers Association

President, Arthur J. Vos, Macklem Baking Co., Denver, Colo; first vice president, W. J. Allingham, Mary Ann Bakery, Denver, Colo; second vice president, Tim Campbell, Sally Ann Baking Co., Grand Junction, Colo; secretary-treasurer, Fred Linsenmaier, 3155 Federal Boulevard, Denver, Colo.

Southern Bakers Association

President, Joseph Hexter, Columbia Baking Co., Atlanta, Ga; vice president, D. Lee Hilton, Charlotte (N. C.) Bread Co; secretary-treasurer, C. M. McMillan, 161 Spring Street N.W., Atlanta, Ga; honorary life treasurer, J. B. Everidge, Columbus, Ga.

Texas Bakers Association

President, Otto Richter, Richter's Bakeries, San Antonio; vice president, George O. Jones, Jones Fine Bread Co., Waco; secretary, Roy Braden, Braden's Cake Shop, Dallas; treasurer, F. H. Eilenberger, American Home Bakery, Palestine.

Tri-State Bakers Association

President, Andrew J. Schwabe, Schwabe's Bakery, New Orleans, La; first vice president, Philip Scalfano, National Bakery, Alexandria, La; second vice president, Joseph Huval, Huval Baking Co., Lafayette, La; third vice president, Tom McGough, McGough Bakeries Corp., Birmingham, Ala; chairman of the board, H. Weil, H. Weil Baking Co., New Orleans, La; secretary-treasurer, Sidney Baudier, Jr., 401 Board of Trade Building, New Orleans, La.

Vermont Bakers Association

President, G. Landale Edson, Cross Baking Co., Inc., Montpelier; vice president, Fred Moquin, Moquin Baking Co., Winooski; secretary, James W. Mackey, Standard Brands, Inc., Rutland; treasurer, J. Park Goddard, Goddard's Bakery, Claremont, N. H.

Western Massachusetts Bakers Association

President, Constant A. Prost, Holyoke; vice president, August Heimmelsbach, Northampton; secretary, William Clish, Standard Brands, Inc., Springfield; treasurer, Henry Trudeau, Holyoke.

Wisconsin Bakers Association, Inc.

President, Fred W. Poehlmann, Poehlmann's Bakery, Milwaukee; vice president, A. W. Lane, Bennison & Lane Co., Janesville; second vice president, Kurt O. Kaiser, Kaiser's Bakery, Milwaukee; executive secretary, Fred H. Laufenburg, 5154 Plankinton Building, Milwaukee; treasurer, Grant C. Van Ness, Milwaukee.

Wyoming Bakers Association

President, Shirley Stewart, Wigwam Bakery, Inc., Casper; vice president, Harry Schliecher, Ideal Bakery, Livingston, Mont; secretary, Carl Eberhart, Home Bakery, Laramie.

STOCKS AND SUPPLIES OF GRAIN AND PRODUCTS

A Section Devoted to Statistics Dealing With the Quantities of Grain and Grain Products Held at Various Important Centers During the Past Year and With Comparisons for Previous Twelve Monthly Periods

QUARTERLY REPORT ON WHEAT AND WHEAT FLOUR STOCKS OWNED BY MILLS

Statistics compiled by United States Department of Commerce showing stocks of wheat and wheat flour owned by a number of mills reporting to the department, by quarters:

Date on which quarter ended—	No. of milling companies reporting	No. of mills represented	Daily capacity in barrels of flour	Percentage of United States wheat flour output*	Wheat stocks owned by mills, in bushels: In country elevators	In public terminal elevators	In private terminal elevators not attached to mills	In transit and bought to arrive	In mills and mill elevators attached to mills	Total wheat stocks	Wheat flour stocks held by mills, including flour in transit and flour both sold and sold, in barrels
Dec. 31, 1941	815	975	562,013	93.3	6,564,937	7,586,589	7,742,348	18,705,648	88,313,755	128,913,277	3,969,581
Sept. 30, 1941	817	977	563,688	93.6	8,100,386	14,368,410	6,393,008	15,144,937	103,457,881	147,464,622	4,586,255
June 30, 1941	841	1,001	564,529	93.3	3,277,799	5,012,688	3,856,687	15,692,466	63,326,774	91,166,414	4,000,876
March 31, 1941	837	997	568,079	94.1	4,230,946	3,166,544	1,690,435	12,979,631	54,298,424	76,365,980	3,922,674
Dec. 31, 1940	762	922	563,885	91.7	5,544,920	6,330,853	3,166,556	10,966,948	74,348,394	100,357,671	4,109,338
Sept. 30, 1940	770	930	569,064	92.0	6,257,928	8,787,144	7,669,573	14,161,611	96,131,151	133,007,407	4,601,343
June 30, 1940	762	922	567,713	91.8	3,037,978	6,346,307	7,176,145	13,457,852	73,668,645	103,686,922	4,193,242
March 31, 1940	748	948	574,940	92.7	4,969,246	7,056,941	4,833,127	14,473,554	78,921,840	110,254,708	3,998,087
Dec. 31, 1939	773	933	575,350	92.5	6,767,270	7,321,710	14,711,885	14,399,474	92,656,023	135,856,362	5,165,181
Sept. 30, 1939	766	926	574,035	92.6	7,996,160	10,031,893	11,285,630	17,536,025	109,912,048	156,761,756	4,667,971
June 30, 1939	758	918	567,838	92.8	5,229,327	5,139,487	6,166,961	17,438,268	65,744,575	99,718,618	3,641,238
March 31, 1939	764	924	570,644	93.3	5,287,561	3,071,138	8,167,233	8,549,083	67,543,870	92,618,885	3,865,456
Dec. 31, 1938	765	925	572,226	93.3	8,070,253	7,385,247	14,416,448	12,445,912	87,159,991	129,477,851	4,316,861
Sept. 30, 1938	763	923	581,733	92.5	8,815,537	6,985,167	15,233,328	13,353,028	100,554,459	144,941,519	4,313,927
June 30, 1938	785	945	588,396	93.6	2,832,809	2,548,166	2,899,178	8,988,332	39,766,565	57,035,050	3,508,143
March 31, 1938	719	879	576,486	92.0	3,459,039	3,683,161	6,028,924	8,649,669	63,420,674	85,241,467	4,151,544

*This percentage is arrived at by taking the total United States flour output to be that reported at the most recent census of manufactures.

Wheat Stored by Mills for Others

The following table shows the amount of wheat stored in mill and mill elevators attached to mills for the account of others, by quarters, as reported to the Department of Commerce by the same companies which reported figures on quarterly mill wheat stocks:

	Bus
Dec. 31, 1941	38,202,352
Sept. 30, 1941	41,529,960
June 30, 1941	24,264,846
March 31, 1941	17,852,333
Dec. 31, 1940	23,131,644
Sept. 30, 1940	26,522,407
June 30, 1940	9,836,197
March 31, 1940	9,129,466
Dec. 31, 1939	13,007,405
Sept. 30, 1939	17,257,247
June 30, 1939	13,162,657
March 31, 1939	9,410,900
Dec. 31, 1938	13,329,425
Sept. 30, 1938	19,878,315

World Commercial Wheat Visible

The world's visible commercial wheat stocks, on the first of each month, in millions of bushels. The figures include the United States and Canadian visible supplies and stocks in the other country, visible supplies in Australia and Argentina, United Kingdom port stocks and stocks afloat.

	*1939 -40	1938 -39	1937 -38	1936 -37	1935 -36
Aug. 1	343	198	180	237	302
Sept. 1	403	264	227	251	317
Oct. 1	...	333	253	282	366
Nov. 1	...	364	245	269	409
Dec. 1	...	377	249	251	397
Jan. 1	...	430	284	267	442
Feb. 1	...	417	275	298	430
March 1	...	389	255	281	394
April 1	...	353	229	255	349
May 1	...	336	197	210	309

*Figures for balance of 1939, 1940 and 1941 are not available because of war restrictions.

WHEAT AT UNITED STATES INTERIOR POINTS

Stocks of old-crop wheat in interior mills, elevators and warehouses, on Jan. 1, April 1, July 1 and Oct. 1, 1940 and 1941, reported by the Department of Agriculture. The report includes stocks not shown in Bureau of Census compilation of stocks of wheat in merchant mills and elevators. Figures in bushels (000's omitted):

State—	January 1940	January 1941	April 1940	April 1941	July 1940	July 1941	October 1940	October 1941
New England	64	60	68	70	68	74	78	140
New York	935	1,650	700	950	320	560	1,200	1,200
New Jersey	60	115	50	65	40	48	120	120
Pennsylvania	900	1,150	770	720	285	325	1,550	1,440
Ohio	2,250	3,525	1,725	2,350	750	1,075	4,350	4,720
Indiana	1,370	1,660	850	1,100	278	660	2,310	4,260
Illinois	2,480	3,200	1,400	1,600	355	1,000	3,250	6,500
Michigan	1,250	1,375	1,200	1,300	450	850	1,400	2,000
Wisconsin	98	140	120	145	95	140	125	200
Minnesota	3,650	6,448	874	6,212	1,437	5,574	6,822	6,617
Iowa	330	370	250	300	170	1,057	525	1,737
Missouri	2,500	4,500	1,375	3,100	1,000	1,150	5,000	4,500
North Dakota	24,260	32,508	16,511	31,305	5,020	27,235	33,520	38,920
South Dakota	5,550	9,500	4,060	8,294	1,125	6,900	9,450	11,230
Nebraska	4,500	6,800	3,300	6,300	2,000	2,300	6,800	7,000
Kansas	9,400	15,000	6,300	11,200	3,000	1,600	16,000	19,500
Maryland	520	560	260	*350	60	120	850	800
Virginia	575	700	350	445	150	180	900	1,000
Kentucky	500	1,100	350	750	90	650	1,700	2,000
Tennessee	410	775	230	420	40	140	930	800
Oklahoma	4,050	4,800	2,700	4,300	900	750	5,600	8,500
Texas	6,200	10,800	4,650	9,125	1,600	1,320	10,800	8,500
Other southern	620	833	452	533	169	278	1,042	874
Montana	8,800	11,609	5,556	10,759	1,762	7,800	11,254	16,229
Idaho	9,500	10,500	5,300	7,000	2,625	3,250	13,500	11,800
Wyoming	345	400	60	100	105	50	200	240
Colorado	3,100	3,100	1,500	1,580	520	480	2,700	3,700
Utah	400	600	300	550	150	500	725	800
Washington	20,496	19,934	12,506	12,921	6,811	4,808	27,498	38,133
Oregon	7,200	7,900	3,400	5,000	1,550	1,475	10,300	15,300
California	3,018	3,242	1,671	2,217	617	803	4,534	4,914
Other western	410	313	159	186	76	88	455	301
United States	125,741	165,167	80,997	131,247	33,618	73,240	185,488	223,975

DISTRIBUTION OF WHEAT CROPS IN CANADA

Distribution of Canadian wheat crops in the last seven crop years, as compiled from statistics published by the Dominion Bureau of Statistics, in bushels (000's omitted):

	1934-35	1935-36	1936-37	1937-38	1938-39	1939-40	1940-41
Gross production	275,849	281,935	219,218	182,410	360,010	520,623	510,190
Grains not merchantable	3,571	9,869	1,515	1,658	3,373	....	....
Loss in cleaning	4,850	4,080	3,500	2,000	6,750	....	....
Net production	267,428	267,986	214,203	177,752	349,887	520,623	510,190
Carry-over	193,990	203,273	108,094	32,938	24,536	102,911	200,473
Imports	897	292	403	6,139	1,892	444	123
Available for distribution	462,315	471,551	322,700	216,829	376,315	623,978	710,786
Requirements—Seed	32,345	33,487	34,112	32,981	34,502	30,516	28,250
Food	42,843	44,864	43,549	43,549	48,043	49,895	51,620
Feed for livestock and poultry	17,603	20,939	15,794	20,103	31,092	36,788	53,000
Remainder for export and carry-over	369,574	372,261	229,245	120,196	262,678	506,779	717,916
Exports wheat, Aug. 1 to July 31	165,750	254,425	195,223	92,957	*139,315	*162,158	*184,907

*Export clearances and imports into the United States for consumption and milling in bond.

GRAIN STOCKS IN CANADA AT END OF CROP YEARS

Stocks of grain in Canada at the close of crop years since 1928 were as follows, in bushels:

	Wheat	Oats	Barley	Flaxseed	Rye
1941	480,083,691	41,713,303	10,674,811	620,313	4,911,710
1940	300,473,465	46,931,028	12,653,875	583,307	5,331,661
1939	102,910,853	48,887,155	12,804,186	118,822	2,911,434
1938	23,553,228	19,498,653	6,447,695	985,576	219,027
1937	32,739,852	18,278,808	4,363,235	464,967	469,702
1936	108,094,277	40,304,697	9,827,631	269,287	3,194,369
1935	203,273,016	26,470,703	5,559,536	312,979	3,137,172
1934	193,990,281	31,060,497	11,092,030	471,295	4,020,234
1933	211,740,188	42,044,758	11,338,322	1,179,575	5,814,727
1932	131,844,806	29,849,319	7,195,655	1,321,358	5,415,715
1931	133,381,633	63,369,892	29,440,418	833,954	14,417,223
1930	111,692,519	21,411,710	22,840,550	636,658	9,192,059
1929	104,383,221	45,165,498	11,020,857	561,487	4,219,756
1928	77,626,071	28,604,960	3,459,693	1,296,347	2,084,615

UNITED STATES WHEAT CARRY-OVER

Carry-over of wheat in the United States at the end of the crop year, June 30, in all positions available, as reported by the Department of Agriculture, in thousand bushels:

	With new wheat in commercial and merchant mill stocks 1938	1939	1940	1941	With only old wheat in all stocks positions 1938	1939	1940	1941
Farms	59,113	90,372	83,146	87,366	59,113	90,372	83,146	87,366
Interior mills and elevators	30,620	36,631	33,618	73,240	30,620	36,631	33,618	73,240
Commercial	28,333	81,334	87,325	151,896	22,190	64,103	84,189	142,671
Merchant mills and mill elevators and stored for others*	54,217	85,029	90,964	93,882	40,791	61,054	80,650	81,598
Totals	172,283	293,366	295,053	406,384	152,714	252,160	281,603	384,875

*Bureau of Census figures raised to represent all merchant mills.

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United States Bonded Grain Stocks

Stocks of bonded grain in the United States in 1940 and 1941, by weeks, in bushels (000's omitted):

1941—	Wheat	Corn	Oats	Rye	Barley
Jan. 4	38,466	1	576	2,593	305
Jan. 11	37,803	1	566	2,586	305
Jan. 18	35,424	1	394	2,812	305
Jan. 25	34,279	1	339	2,799	305
Feb. 1	33,773	1	339	2,776	398
Feb. 8	33,878	1	334	2,757	388
Feb. 15	32,718	1	274	2,650	193
Feb. 22	32,248	1	133	2,629	173
March 1	31,847	..	124	2,597	173
March 8	31,683	..	124	2,565	265
March 15	29,733	..	64	2,525	381
March 22	30,306	..	64	2,512	327
March 29	30,497	..	64	2,464	346
April 5	30,307	..	64	2,308	289
April 12	27,992	..	64	2,222	220
April 19	26,858	..	76	2,170	210
April 26	24,518	..	308	2,141	134
May 3	23,716	..	142	1,864	143
May 10	25,616	..	185	2,252	89
May 17	27,404	..	558	2,295	39
May 24	27,892	..	312	2,431	39
May 31	29,292	..	410	2,627	33
June 7	29,661	..	233	2,833	12
June 14	29,530	..	471	2,894	10
June 21	28,877	..	452	3,047	10
June 28	27,739	..	444	3,515	84
July 5	26,765	..	497	3,459	162
July 12	26,728	..	299	3,514	241
July 19	25,449	..	361	3,480	271
July 26	24,962	..	382	3,517	149
Aug. 2	23,997	..	336	17	200
Aug. 9	24,071	..	461	223	246
Aug. 16	22,989	..	282	136	107
Aug. 23	21,737	..	384	68	97
Aug. 30	19,811	..	424	4	87
Sept. 6	17,509	..	273	4	77
Sept. 13	17,590	..	74	284	131
Sept. 20	16,291	..	73	228	214
Sept. 27	15,830	1	123	474	47
Oct. 4	15,923	3	283	431	37
Oct. 11	15,458	3	274	281	27
Oct. 18	15,147	3	257	280	17
Oct. 25	15,621	3	257	102	7
Nov. 1	15,222	3	257	300	..
Nov. 8	15,827	3	244	165	..
Nov. 15	16,561	3	227	4	..
Nov. 22	17,076	3	278	300	65
Nov. 29	20,370	3	309	412	690
Dec. 9	20,513	3	309	537	950
Dec. 13	21,662	3	258	472	865
Dec. 20	21,181	3	126	468	865
Dec. 27	20,388	3	126	468	865

1940—	Wheat	Corn	Oats	Rye	Barley
Jan. 6	29,233	..	1,241	569	2,450
Jan. 13	28,216	..	1,158	628	2,407
Jan. 20	26,930	..	1,158	746	2,421
Jan. 27	24,937	..	1,055	742	2,325
Feb. 3	24,868	..	968	744	2,027
Feb. 10	23,018	..	931	742	1,845
Feb. 17	21,892	..	844	746	1,590
Feb. 24	20,308	..	902	746	1,552
Mch. 2	18,854	..	783	746	1,544
Mch. 9	17,176	..	735	741	1,411
Mch. 16	16,132	..	670	606	1,393
Mch. 23	15,227	..	475	741	1,404
Mch. 30	13,086	..	427	965	1,271
April 6	12,298	..	379	1,094	1,266
April 13	11,990	..	190	1,094	1,264
April 20	11,480	..	104	1,094	1,269
April 27	9,241	..	38	1,094	1,256
May 4	10,750	..	375	1,094	1,222
May 11	13,550	..	679	1,443	1,222
May 18	14,055	..	797	1,741	1,265
May 25	14,151	..	1,118	2,351	1,275
June 1	13,800	..	454	2,569	1,386
June 8	13,789	..	708	2,568	1,386
June 15	14,516	..	735	2,568	1,184
June 22	15,326	..	380	2,568	1,222
June 29	15,286	..	338	2,631	1,222
July 6	14,777	..	311	2,593	1,236
July 13	14,661	..	214	2,568	1,266
July 20	14,378	..	330	2,567	1,192
July 27	13,797	..	75	2,499	1,210
Aug. 3	14,234	..	98	2,594	1,207
Aug. 10	15,247	..	235	2,411	1,207
Aug. 17	16,885	..	451	2,437	1,158
Aug. 24	15,946	..	385	2,412	1,208
Aug. 31	17,677	..	244	2,412	1,181
Sept. 7	19,146	..	317	2,404	1,150
Sept. 14	22,330	..	485	2,404	1,071
Sept. 21	22,377	..	375	2,513	1,014
Sept. 28	23,169	..	258	2,404	982
Oct. 5	22,378	..	337	2,404	863
Oct. 12	23,682	..	158	2,404	532
Oct. 19	24,092	4	232	2,404	795
Oct. 26	24,780	4	269	2,404	810
Nov. 2	25,005	4	392	2,402	686
Nov. 9	24,390	3	254	2,404	664
Nov. 16	28,624	3	301	2,406	638
Nov. 23	30,631	3	219	2,406	574
Nov. 30	33,041	3	1,039	2,398	401
Dec. 7	34,579	2	694	2,616	663
Dec. 14	36,297	2	941	2,609	461
Dec. 21	38,062	2	818	2,602	305
Dec. 28	38,589	1	670	2,597	305

American Cereals—Average Composition

Table prepared for The Northwestern Miller by Charles H. Briggs, of the Howard Wheat and Flour Testing Laboratory, Minneapolis:

	Moisture	Ash	Protein	Fat	Crude fiber	Starch, sugar, etc.
Wheat	12.2	1.8	12.0	2.3	2.7	69.0
Spring wheat	12.1	1.9	13.3	2.3	2.9	67.5
Hard winter wheat	12.8	1.8	12.5	2.3	2.8	67.8
Soft winter wheat	12.1	1.7	10.1	2.4	2.8	70.9
Western white wheat	10.6	1.9	10.9	2.2	1.8	72.6
Durum wheat	12.0	1.6	12.9	2.1	1.8	69.6
Rye	10.5	2.0	12.2	1.6	1.9	71.8
Barley	11.2	2.6	10.7	2.2	3.8	69.5
Corn	10.8	1.5	10.0	4.3	1.7	71.7
Oats with hull	11.0	3.0	11.8	5.0	9.5	59.7
Hulled—						
Oats	9.0	1.9	15.6	5.6	1.3	66.6
Rice	12.0	1.0	8.0	2.0	1.0	76.0
Polished rice	11.5	0.8	7.2	0.6	0.8	79.1
Buckwh't	12.6	2.0	10.0	2.2	8.7	64.5

United States Grain Exchanges

The following is a list of the grain exchanges in the United States: Baltimore Chamber of Commerce, Birmingham Grain Dealers Association, Boston Grain & Flour Exchange, Buffalo Corn Exchange, Cairo Board of Trade, Chicago Board of Trade, Cincinnati Board of Trade, Denver Grain Exchange Association, Des Moines Board of Trade, Detroit Board of Trade, Duluth Board of Trade, Enid Board of Trade, Fort Worth Grain & Cotton Exchange, Galveston Cotton Exchange and Board of Trade, Hutchinson Board of Trade Association, Indianapolis Board of Trade, Kansas City Board of Trade, Los Angeles Grain Exchange, Louisville Board of Trade, Memphis Merchants Exchange, Milwaukee Grain & Stock Exchange, Minneapolis Chamber of Commerce, Nashville Grain Exchange, New Orleans Board of Trade, Ltd., New York Produce Exchange, Ogden Grain Exchange, Omaha Grain Exchange, Peoria Board of Trade, Commercial Exchange of Philadelphia, Portland (Oregon) Grain Exchange, Richmond Grain Exchange, St. Joseph Grain Exchange, St. Louis Merchants Exchange, Salina Board of Trade, San Francisco Grain Exchange, Seattle Grain Exchange, Sioux City Grain Exchange, Toledo Board of Trade, Topeka Board of Trade, Wichita Board of Trade.

Quarterly Grain Stocks on Farms

The following tables show estimated stocks of wheat, corn and oats held on farms ofr all purposes on the first of each month specified, in thousand bushels, as estimated by the U. S. Department of Agriculture:

Wheat—	Jan.	April	July	Oct.
1942.	373,820	.....	.....	.....
1941.	280,840	193,244	87,366	488,311
1940.	234,514	153,776	83,146	369,447
1939.	280,088	189,090	90,838	332,213
1938.	208,510	124,652	59,113	401,411
1937.	128,314	71,463	21,851	326,503
1936.	159,390	98,978	43,988	225,505
1935.	137,504	93,699	41,926	257,242
1934.	196,508	116,298	60,323	229,100
1933.	273,012	183,185	82,309	285,330
Corn—				
1942.	2,012,138	.....	.....	.....
1941.	1,837,512	1,199,139	754,464	474,622
1940.	1,914,184	1,273,015	853,223	548,625
1939.	1,819,710	1,204,229	836,921	546,052
1938.	1,673,221	1,071,120	642,922	353,194
1937.	806,935	409,074	155,115	60,571
1936.	1,342,908	816,058	394,794	175,222
1935.	810,479	438,180	202,459	60,696
1934.	1,389,327	841,498	474,370	266,740
1933.	1,813,479	1,128,122	630,849	317,863
Oats—				
1942.	749,417	.....	.....	.....
1941.	795,448	471,145	220,048	952,329
1940.	593,865	345,664	143,488	1,026,452
1939.	695,695	408,543	184,877	762,506
1938.	698,431	421,840	196,065	854,323
1937.	482,158	286,301	88,156	904,790
1936.	771,452	493,787	246,952	682,920
1935.	343,779	208,185	70,492	962,035
1934.	688,284	275,425	107,577	446,287
1933.	763,195	467,976	204,372	608,005

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TRADING IN MILLFEED FUTURES AT KANSAS CITY AND ST. LOUIS

Volume of trading in the Kansas City and St. Louis millfeed futures markets is shown in the following table compiled by the Commodity Exchange Administration:

Fiscal year	Kansas City		St. Louis (Delivery in Chicago)		St. Louis	Total
1940-41—	Bran	Shorts	Bran	Middlings	Shorts	millfeeds
July	18,850	7,150	17,600	6,500	400	50,500
August	16,100	6,550	17,100	5,300	200	45,250
September	17,300	8,700	12,750	3,100	200	42,050
October	34,950	7,250	22,500	3,600	200	68,500
November	29,825	11,000	13,300	1,900	800	56,825
December	21,175	13,525	9,900	2,000	1,100	47,700
January	25,950	10,650	7,300	2,100	1,500	48,100
February	21,375	15,275	9,600	1,400	1,600	49,250
March	20,850	21,925	6,100	1,600	1,400	51,875
April	21,025	18,375	19,200	5,100	2,500	66,200
May	36,950	15,525	22,300	3,300	400	78,475
June	31,725	14,200	13,700	2,800	1,000	63,425
1940-41	296,075	150,125	171,950	38,700	11,300	668,150
1939-40	180,150	72,850	196,400	40,000	9,200	498,600
1938-39	171,300	82,900	191,800	14,500	19,750	480,250

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World Wheat Carry-Over

Estimated world carry-over of wheat on July 1 for a series of years, as compiled by the Division of Statistical and Historical Research, Bureau of Agricultural Economics of the Department of Agriculture. The figure represents, as nearly as possible, total stocks of old crop wheat minus domestic requirements for the remainder of each country's crop year. The figures are in millions of bushels:

	United States‡	Canadian†	Argentina	Australia	Total
1941*.....	385	511	180	78	1,154
1940.....	282	320	102	136	840
1939.....	253	119	263	65	700
1938.....	153	36	98	69	356
1937.....	83	52	60	53	248
1936.....	142	155	73	54	424
1935.....	147	225	106	70	548
1934.....	274	221	144	102	741
1933.....	382	237	98	70	787
1932.....	391	160	73	58	682
1931.....	328	157	94	77	656
1930.....	294	153	70	57	574
1929.....	232	152	155	47	586
1928.....	115	128	107	43	393
1927.....	111	69	89	46	315
1926.....	101	64	85	27	277
1925.....	111	50	73	37	271

United States—Stocks on farms, in country mills and elevators, commercial, in merchant mills and elevators, and stored for others by merchant mills.

Canada—1922-23, carry-over Aug. 31, plus net exports and estimated retention of flour during July and August; beginning 1924, carry-over July 31, plus net exports and estimated retention of flour for July.

Argentina—Carry-over on Dec. 31, plus exports and estimated domestic consumption, July 1 to Dec. 31.

Australia—1922-24, exports only plus estimated domestic consumption; beginning 1925, July 1 to Dec. 31, carry-over on Dec. 1, plus net exports and estimated domestic consumption July 1 to Nov. 30.

‡Includes United States wheat in Canada. Includes small quantities of new wheat prior to 1937. †Includes Canadian wheat in the United States. *Preliminary.

United States Visible Grain Supply

Visible supply of grain at principal points of accumulation at lake and Atlantic ports, and in transit by water, as reported by the Chicago Board of Trade, on the first day of each month, by years, in bushels (000,000's omitted):

WHEAT

	'41	'40	'39	'38	'37	'36	'35	'34	'33	'32
Jan....	149	119	115	87	57	70	81	125	163	213
Feb....	139	109	101	72	48	64	70	112	154	204
March.	131	99	85	58	40	55	58	101	144	203
April..	123	96	75	49	31	47	48	91	136	202
May...	117	98	68	39	23	39	40	85	123	178
June...	119	94	58	28	15	28	30	76	115	168
July...	127	86	77	28	16	22	23	77	123	163
Aug...	202	146	140	91	88	67	29	110	132	170
Sept...	221	167	150	120	123	78	59	115	142	178
Oct....	228	174	146	125	131	76	73	112	148	188
Nov....	229	165	136	126	120	70	78	103	141	184
Dec....	224	156	128	125	106	66	75	93	133	176

CORN

	'41	'40	'39	'38	'37	'36	'35	'34	'33	'32
Jan.....	63	44	49	35	13	7	40	67	29	11
Feb.....	63	41	48	39	14	6	32	65	32	13
March..	62	39	45	38	13	5	26	66	33	17
April...	63	39	42	41	11	7	20	63	35	22
May....	59	34	39	38	6	8	14	54	30	21
June....	56	24	34	24	3	6	10	44	35	20
July....	48	25	30	24	5	7	8	35	46	16
Aug....	39	26	23	17	8	5	6	38	61	11
Sept....	38	27	13	10	5	4	6	58	56	13
Oct.....	36	37	14	11	5	4	3	60	57	18
Nov.....	37	53	25	25	5	3	2	58	59	27
Dec.....	37	59	37	44	22	7	4	49	62	26

RYE

	'41	'40	'39	'38	'37	'36	'35	'34	'33	'32
Jan.....	7	10	8	5	5	9	12	14	8	10
Feb.....	6	10	8	4	4	8	11	13	8	9
March..	5	10	8	4	4	8	11	12	8	9
April...	5	10	8	3	3	7	10	11	8	9
May....	5	10	7	3	3	7	9	11	8	9
June....	5	10	7	2	2	7	9	10	8	9
July....	5	9	7	1	1	7	8	11	11	9
Aug....	10	9	8	1	1	6	7	12	11	9
Sept....	14	9	9	6	4	7	7	12	12	9
Oct.....	17	8	9	8	6	6	8	12	13	9
Nov.....	17	8	10	8	6	6	9	11	13	8
Dec.....	18	7	10	9	6	6	10	13	14	8

OATS

	'41	'40	'39	'38	'37	'36	'35	'34	'33	'32
Jan.....	6	11	16	25	34	41	21	45	5	16
Feb.....	5	9	15	24	29	40	20	44	4	16
March..	4	7	14	23	25	39	19	41	4	17
April...	3	7	12	21	18	38	14	37	3	16
May....	4	6	10	15	11	36	11	32	3	13
June....	4	4	7	9	5	31	10	26	3	11
July....	3	3	6	7	2	31	8	22	2	10
Aug....	6	2	6	7	3	39	7	21	4	11
Sept....	11	8	14	20	17	51	25	24	12	24
Oct.....	12	8	16	21	27	50	41	23	18	26
Nov.....	10	6	14	22	26	47	44	22	17	27
Dec.....	10	6	13	20	24	41	46	21	16	26

Millers and Feed Manufacturers Accident Prevention Association

Chairman, W. D. Price, Ralston-Purina Co., Ltd., Woodstock, Ont; vice chairman, C. E. Soward, Maple Leaf Milling Co., Ltd., Toronto; board of directors, R. R. Barber, S. J. Cherry & Sons, Ltd., Preston; Norman H. Campbell, Lakeside Milling Co., Ltd., Toronto; Lewis H. Ingram, Quaker Oats Co., Peterborough; G. B. MacDonald, Toronto Elevators, Ltd., Toronto; George Murdoch, Hagersville; W. D. Price, Ralston-Purina Co., Ltd., Woodstock; C. E. Soward, Maple Leaf Milling Co., Toronto; W. H. McCarthy, McCarthy Milling Co., Ltd., Streetsville.

WHEAT SUPPLY, DISTRIBUTION AND PER CAPITA DISAPPEARANCE IN THE UNITED STATES

A table prepared by the Bureau of Agricultural Economics, United States Department of Agriculture, showing the supply and distribution of the wheat crop in the United States, by years beginning July 1, in bushels (000's omitted):

SUPPLY

Year beginning July—	Stocks July 1—On farms	Stocks July 1—In country elevators and mills	Stocks July 1—Commercial stocks*	Stocks July 1—In merchant mills and elevators and stored for others†	Stocks July 1—Total	New crop	Imports (flour included)‡	Total supply
With new wheat in commercial and merchant mill stocks—								
1941	87,366	73,240	151,896	93,882	406,384	945,937	....	1,352,321
1940	83,146	33,618	87,325	90,964	295,053	812,374	3,523	1,110,950
1939	90,372	36,631	81,334	85,029	293,366	751,435	263	1,045,064
1938	59,113	30,620	28,333	54,214	172,280	931,702	271	1,104,253
1937	21,851	11,530	16,197	52,899	102,477	875,676	634	978,787
1936	43,988	21,908	25,202	50,590	141,688	626,766	34,455	802,909
1935	44,339	30,894	21,951	49,524	146,708	626,344	34,617	807,669
1934	62,516	48,128	80,548	83,114	274,306	526,393	¶15,569	816,268
1933	32,882	64,293	123,712	107,052	377,939	551,683	153	929,775
1932	93,769	41,585	168,405	71,714	375,473	756,927	10	1,132,410
1931	37,867	30,252	203,967	41,202	313,288	941,674	7	1,254,969
1930	60,216	60,166	109,327	59,170	288,879	886,470	354	1,175,703
1929	45,106	41,546	90,442	51,279	228,373	823,217	53	1,051,643
1928	19,588	19,277	38,587	34,920	112,372	914,373	91	1,026,836
1927	26,640	21,776	21,052	40,038	109,506	875,059	188	984,753
With only old wheat in all stocks positions—								
1941	87,366	73,240	142,671	81,598	384,875	945,937	....	1,330,812
1940	83,146	33,618	84,189	80,650	281,603	812,374	3,523	1,097,500
1939	90,372	36,631	64,103	‖61,054	252,160	751,435	263	1,003,858
1938	59,113	30,620	22,190	‖40,791	152,714	931,702	271	1,084,687
1937	21,851	11,530	9,022	‖40,399	82,802	876,676	634	959,112

DISTRIBUTION (BUS, 000'S OMITTED)

Year beginning July—	Exports and shipments‡—Exports (wheat only)	Exports and shipments‡—Exports flour as wheat	Exports and shipments‡—Shipments (flour included)**	Exports and shipments‡—Total	Domestic disappearance—Seed	Domestic disappearance—Feed (fed on farms of wheat growers)	Domestic disappearance—Foods and commercial feed††	Domestic disappearance—Total	Stocks June 30‡‡	Per capita disappearance total less seed
With new wheat in commercial and merchant mill stocks—										
1940	10,810	22,841	¶¶3,600	37,251	74,713	100,408	492,194	667,315	406,384	..
1939	23,636	21,232	3,475	48,343	72,853	91,487	537,328	701,668	295,053	4.8
1938	84,589	22,057	2,888	109,534	75,454	125,591	500,308	701,353	293,366	4.8
1937	83,740	16,320	3,321	103,381	94,146	112,860	496,120	703,126	172,280	4.7
1936	3,168	6,099	2,996	12,263	96,593	88,272	503,304	688,169	102,477	4.6
1935	311	3,896	2,889	7,096	87,555	83,168	488,162	658,885	141,688	4.5
1934	3,019	7,512	2,783	13,314	82,585	83,700	489,961	656,246	146,708	4.5
1933	18,800	6,798	2,779	28,377	77,832	72,261	476,999	627,092	274,306	4.4
1932	20,887	10,979	3,023	34,889	83,513	124,912	511,157	719,582	377,939	5.1
1931	96,521	26,376	2,757	125,654	80,049	173,991	499,802	753,842	375,473	5.4
1930	76,365	36,063	2,850	115,278	80,886	157,188	509,063	747,137	313,288	5.4
1929	92,175	48,179	2,983	143,337	83,353	58,769	477,305	619,427	288,879	4.4
1928	103,114	38,106	3,172	144,392	83,663	56,566	513,842	654,071	228,373	4.7
1927	145,999	45,228	2,692	193,919	89,864	44,507	544,091	678,462	112,372	4.9
With only old wheat in all stocks positions—										
1940	10,810	22,841	¶¶3,600	37,251	74,713	100,408	500,253	675,374	384,875	..
1939	23,636	21,232	3,475	48,343	72,853	91,487	509,572	673,912	281,603	4.6
1938	84,589	22,057	2,888	109,534	75,454	125,591	521,948	722,993	252,160	5.0
1937	83,740	16,320	3,321	103,381	94,146	112,860	496,011	703,017	152,714	4.7

*1923 to 1926 Bradstreets, excluding country elevator stocks. †Stocks in merchant mills and elevators—1923 and 1924 estimated in absence of actual figures; 1925 to 1940, Bureau of Census figures raised to represent all merchant mills. Stored for others—1923 to 1929 estimated in absence of actual figures; 1930 to 1940, Bureau of Census figures raised to represent all merchant mills. ‡From reports of Foreign and Domestic Commerce of the United States. Imports include full-duty wheat, wheat paying a duty of 10% ad valorem, and dutiable flour in terms of wheat; and exclude flour free for export as follows: 42,742 bus in 1935-36; 108,095 bus in 1937-38; 363,263 bus in 1938-39; 213,930 bus in 1939-40, and 169,670 bus in 1940-41. Exports include only flour made from domestic wheat; 1923-35 estimated on basis of total exports less wheat imported for milling in bond and export adjusted for changes in carry-over; beginning 1935 figures for exports and shipments of flour wholly from United States wheat. ¶Includes durum wheat returned from Montreal estimated at 1,500,000 bus. ‖For 1937 excludes new wheat estimated at 12,500,000 bus; for 1938 excludes 13,423,000 bus, for 1939 23,975,000 bus, for 1940 10,314,000 bus, and for 1941 12,384,000 bus reported as new wheat by Bureau of Census. **Shipments are to Alaska, Hawaii, Porto Rico and Virgin Islands (Virgin Islands prior to Dec. 31, 1934, included with domestic exports). ††Balancing item. ‡‡For individual items, see supply section of this table. ¶¶Estimated.

UNITED STATES MILLING AND FLOUR DISPOSITION

A table prepared by the Food Research Institute of Stanford University, California, shows the production and disposition of flour by crop years since 1922-23:

July-June	Wheat ground—Total (million bus)	Wheat ground—Per bbl (bus)	Wheat ground—Millfeed, tons (000's omitted)	Flour production and disposition (000's omitted)—Output	Flour production and disposition (000's omitted)—Domestic exports*	Flour production and disposition (000's omitted)—Imports less re-exports	Flour production and disposition (000's omitted)—Shipments to possessions†	Flour production and disposition (000's omitted)—Net exports plus shipments	Flour production and disposition (000's omitted)—Computed net retention†	Flour production and disposition (000's omitted)—Estimated consumption	Per capita consumption—Flour, lbs	Per capita consumption—As wheat (bus)
1940-41	507.9	4.547	4,290	111,695	6,353	62	745	7,036	104,659	104,100	154	3.57
1939-40	495.1	4.560	4,298	110,761	6,519	70	714	7,163	103,598	103,200	154	3.58
1938-39	508.1	4.579	4,368	110,963	6,637	79	593	7,151	103,811	102,600	154	3.60
1937-38	493.9	4.610	4,318	107,147	4,999	34	684	5,649	101,498	102,000	154	3.62
1936-37	492.1	4.608	4,298	106,803	3,918	39	516	4,495	102,308	101,400	154	3.62
1935-36	483.6	4.628	4,268	104,595	3,323	35	598	3,886	100,619	100,700	154	3.64
1934-35	470.8	4.561	4,008	103,227	3,934	0	576	4,510	98,717	100,000	154	3.59
1933-34	460.0	4.582	3,962	100,394	3,873	1	579	4,451	95,943	99,000	154	3.60
1932-33	506.6	4.585	4,370	110,495	4,379	0	630	5,009	105,486	101,500	159	3.71
1931-32	515.0	4.575	4,419	112,576	8,356	(1)	571	8,928	103,648	102,800	162	3.77
1930-31	537.9	4.613	4,709	116,595	11,726	0	593	12,319	104,276	105,100	167	3.92

Estimates by the Food Research Institute of wheat ground, millfeed output, flour output, and flour consumption, combined with official trade data.
*Including flour milled in bond from imported wheat. †Alaska, Hawaii, Porto Rico, and since January, 1935, Virgin Islands.

CHICAGO WHEAT FUTURES OPEN INTEREST

Maximum, minimum and average open interest in wheat futures, by months, on the Chicago Board of Trade, in thousands of bushels (i.e., 000's omitted):

	1939 Maximum	1939 Minimum	1939 Average	1940 Maximum	1940 Minimum	1940 Average	1941 Maximum	1941 Minimum	1941 Av'rage
January	97,049	89,246	92,806	86,711	80,262	84,593	50,096	47,699	48,597
February	90,536	86,311	88,171	89,059	79,106	82,183	*49,653	45,688	48,131
March	85,991	78,973	83,190	95,684	90,174	92,173	45,799	42,801	44,344
April	78,413	65,687	71,232	128,173	94,686	108,233	45,901	41,537	43,766
May	73,872	65,400	68,733	129,264	75,367	103,636	47,113	38,840	43,903
June	79,831	71,305	73,453	74,859	65,238	68,471	41,746	38,021	39,966
July	95,541	79,441	89,133	80,287	66,640	75,834	52,113	40,961	47,532
August	99,320	90,873	95,696	84,434	70,137	79,291	52,314	48,977	50,659
September	89,206	74,844	77,968	67,888	58,044	60,179	55,510	50,701	53,395
October	85,326	78,611	81,300	58,353	54,582	56,048	59,540	51,312	54,986
November	87,067	82,884	86,022	56,577	54,534	55,607	54,456	50,386	53,229
December	85,006	76,482	80,665	56,581	50,179	53,790	*49,430	*38,805	*42,440

*Preliminary.

WHEAT USE BY CLASSES IN UNITED STATES

Estimated supply and distribution of wheat in the United States, by classes, as calculated by the Department of Agriculture, in million bushels:

ALL WHEAT

Item—	Average, 1929-30 to 1933-34	1936-37	1937-38	1938-39	1939-40	1940-41	1941-42
Stocks, July 1	317	142	83	153	252	282	387
Production	792	627	876	932	751	812	946
Imports	...	34	...	...	...	...	...
Supply	1,109	803	959	1,085	1,003	1,094	1,333
Exports*	90	12	103	109	48	29	...
Carry-over	325	103	153	254	282	387	663
Disappearance	694	688	703	722	673	673	670

HARD RED WINTER

Stocks, July 1	161	57	37	60	114	135	160
Production	349	260	373	390	309	328	394
Supply	510	317	410	450	423	463	554
Exports*	52	3	69	68	22	6	...
Carry-over	167	57	60	114	135	160	259
Disappearance	291	257	281	268	266	297	295

SOFT RED WINTER

Stocks, July 1	32	27	15	37	29	25	42
Production	185	207	258	236	206	207	212
Supply	217	234	273	273	235	232	254
Exports*	2	...	5	5	3	3	...
Carry-over	35	15	37	30	25	42	69
Disappearance	180	219	231	238	307	187	185

HARD RED SPRING

Stocks, July 1	79	34	18	31	72	83	136
Production	135	51	102	157	121	157	206
Imports	...	25	...	...	...	...	...
Supply	214	110	120	188	193	240	342
Exports*	1	...	3	4	5	1	...
Carry-over	79	18	31	72	83	136	240
Disappearance	134	92	86	112	105	103	102

DURUM

Stocks, July 1	24	7	3	5	17	18	26
Production	40	9	29	42	35	34	43
Imports	..	9	..	..	..	..	..
Supply	64	25	32	47	52	52	69
Exports*	7	..	..	2	..	..	..
Carry-over	20	3	5	17	18	26	41
Disappearance	37	22	27	28	34	26	28

WHITE

Stocks, July 1	21	17	10	20	20	21	23
Production	83	100	114	107	80	86	91
Supply	104	117	124	127	100	107	114
Exports*	28	9	26	30	18	24	..
Carry-over	24	10	20	20	21	23	54
Disappearance	52	98	78	77	61	60	60

*Exports are regular exports plus shipments to Alaska, Porto Rico, and include wheat and flour made wholly of domestic wheat.

UNITED STATES GRAIN FUTURES TRADING

Volume of trading (sales only) in grain futures on the nine principal "contract markets" of the United States (Chicago Board of Trade, Chicago Open Board of Trade, Minneapolis Chamber of Commerce, Kansas City Board of Trade, Duluth Board of Trade, St. Louis Merchants' Exchange, Milwaukee Chamber of Commerce, New York Produce Exchange and Seattle Merchants' Exchange), by calendar years, as reported by the United States Grain Futures Administration, in bushels (000's omitted):

TOTALS BY YEARS

All grains—	Chicago	Chicago Open	Minneapolis	K. City	Duluth	St. Louis	Milwaukee	Hutchinson*	Seattle and Portland	Totals
1941	6,280,353	144,377	697,156	499,594	41,568	.....	7,378	.....	4,526	7,674,952
1940	6,906,872	189,411	660,071	609,022	42,525	.....	7,468	.....	2,703	8,418,072
1939	7,061,651	158,321	649,088	666,011	42,853	.....	9,991	.....	†2,428	8,590,324
1938	7,473,963	157,879	521,548	633,541	43,331	348	10,003	...	†4,281	8,844,894
1937	13,213,120	212,940	698,658	1,033,840	30,340	4,427	34,352	...	†4,410	16,672,087
1936	10,442,719	165,501	676,365	773,886	19,728	2,380	23,850	508	2,435	12,107,372
1935	10,175,599	160,703	710,179	810,019	27,438	2,087	27,500	505	4,380	11,918,410
1934	12,064,634	212,551	725,689	856,382	36,932	1,195	40,824	5,930	316	13,950,453
1933	15,596,419	356,239	975,303	1,091,410	122,268	9,360	51,629	332	11,113	18,214,108
1932	10,006,346	336,989	531,291	729,188	90,998	11,733	27,278	772	6,822	11,741,417
1931	11,502,073	439,853	584,427	738,948	145,657	12,322	45,164	16,037	18,418	13,502,899
Wheat—										
1941	3,800,866	112,276	495,988	486,196	41,568	.....	4,044	.....	4,522	4,945,455
1940	5,444,785	176,645	480,716	581,724	42,525	.....	4,859	.....	2,695	6,733,949
1939	5,026,736	136,871	435,452	620,612	42,853	.....	5,528	.....	2,306	6,270,358
1938	5,683,442	141,431	374,718	592,014	43,181	343	5,670	...	4,257	6,845,056
1937	10,889,144	178,925	496,793	956,254	29,976	3,990	17,269	...	3,871	12,576,209
1936	7,342,880	140,243	405,485	694,705	18,004	1,456	11,631	508	2,435	8,617,347
1935	7,062,731	130,651	531,394	695,058	24,896	1,218	11,992	505	4,380	8,462,824
1934	7,536,392	179,280	512,237	678,179	30,920	1,195	16,371	5,930	316	8,960,820
1933	10,353,832	294,269	680,281	908,429	98,566	9,360	23,668	332	11,113	12,386,850
1932	8,078,173	301,556	417,619	688,858	75,053	11,308	15,193	23	6,822	9,594,605
1931	6,924,633	287,032	364,940	561,944	110,505	9,116	13,801	15,075	18,418	8,305,464

*The figures for 1926 and 1927 in this column are for New York and 1931 and 1932 for Omaha. †Includes Los Angeles and San Francisco.

John F. Cameron & Co., Ltd.

Flour Importers

8, South College Street ABERDEEN, SCOTLAND

Cable Address: "VIGILANT" Code: RIVERSIDE

STORAGE CAPACITY OF GRAIN ELEVATORS AT IMPORTANT CENTERS

A Section Devoted to Statistics Giving Details of the Grain Storage Capacity of Elevators at Various Important Milling and Grain Forwarding Centers of the United States and Canada

ELEVATORS AT CENTERS

Number and estimated capacity of elevators at leading United States and Canadian grain storage centers, Jan. 1, 1942:

	No. of elevators	Capacity, bus
Minneapolis, Minn.	65	95,573,050
Chicago, Ill.	45	54,219,000
Duluth, Minn.	30	50,415,000
Albany, N. Y.	1	13,500,000
New York, N. Y.	3	4,450,000
Buffalo, N. Y.	36	57,403,000
Kansas City, Mo.	41	60,162,000
Detroit, Mich.	6	1,600,000
Indianapolis, Ind	8	6,400,000
Toledo, Ohio	13	11,389,000
Cincinnati, Ohio	14	4,290,000
Cleveland, Ohio	6	895,000
St. Louis, Mo.	35	20,620,500
New Orleans, La.	2	2,872,000
San Francisco and near-by points	17	*394,500
	1	1,250,000
Seattle, Wash.	8	5,110,000
		‡1,730,000
Portland, Oregon	18	*275,100
Tacoma, Wash.	4	‡1,614,000
		2,310,000
Baltimore, Md.	5	12,750,000
Boston, Mass.	3	2,500,000
Omaha, Neb.	18	27,360,000
St. Joseph, Mo.	11	10,712,000
Milwaukee, Wis.	20	29,140,000
Philadelphia, Pa.	3	4,975,000
Galveston, Texas	3	7,365,000
Nashville, Tenn.	14	2,105,000
Memphis, Tenn.	9	4,000,000
Norfolk, Va.	2	725,000
Fort Worth, Texas	13	19,550,000
Evansville, Ind.	6	1,985,000
Enid, Okla.	11	16,058,000
Wichita, Kansas	13	15,995,000
CANADA		
Fort William and Port Arthur, Ont.		92,852,210
Montreal, Que.		15,912,000
Port Colborne, Ont.		5,250,000
Port McNicoll, Ont.		6,500,000
Vancouver, B. C.		19,583,500
Collingwood, Ont.		2,000,000
Goderich, Ont.		3,600,000
Midland, Ont.		13,650,000
Halifax, N. S.		2,200,000
Sarnia, Ont.		3,000,000
Kingston, Ont.		2,750,000
Owen Sound, Ont.		4,000,000
Prescott, Ont.		5,500,000
Quebec, Que.		4,000,000
Toronto, Ont		4,000,000
Sorel, Que.		3,000,000
Three Rivers, Que.		2,000,000
Winnipeg, Man.		2,220,000
Transcona, Man.		1,000,000
North Transcona, Man.		1,000,000
St. Boniface, Man.		1,915,000

*Capacity in tons for sacked grain. ‡Capacity in bushels for sacked grain.

SOUTHWEST ELEVATORS

Kansas City

Kansas City has 41 public and private elevators with a combined storage capacity of 62,182,000 bus. Names of large elevators with capacity and names of companies operating them (does not include mills):

	Capacity, bus
Alton Elevator—Salina Terminal Elevator Co.	1,000,000
Burlington—Norris Grain Co.	2,500,000
Checkerboard Elevator Co.	800,000
C. G. W., Great Western Elevator—Wolcott & Lincoln Co.	1,000,000
Corn Products Refining Co.	500,000
Elevator "A," Santa Fe—Davis-Noland-Merrill Grain Co.	10,000,000
K.C.S.—Moore-Seaver Grain Co.	1,400,000
Kansas-Missouri—Continental Grain Co.	5,500,000
Katy Elevator—Uhlmann Grain Co.	3,300,000
Mid-Continent—Mid-Continent Grain Co.	750,000
Milwaukee Elevator—Cargill, Inc.	2,900,000
Norris Elevator—Norris Grain Co.	2,800,000
River-Rail—Hart-Bartlett-Sturtevant Grain Co.	3,000,000
Rock Island Elevator—Simonds-Shields-Theis Grain Co.	4,000,000
Wabash Elevator—Uhlmann Grain Co.	4,100,000
Feed mills, smaller elevators (14)	1,597,000
	45,147,000

KANSAS CITY FLOUR MILL ELEVATORS

	Capacity, bus
Continental Baking Co.	500,000
Kansas Flour Mills Corp.	2,315,000
Larabee Flour Mills Co.	1,100,000
Midland Flour Milling Co.	400,000
Rodney Milling Co.	3,450,000
Southwestern (Standard Milling Co.)	2,500,000
United Mills	400,000
Waggoner-Gates Milling Co. (Independence, Mo.)	350,000
Washburn Crosby Co.	4,000,000
	15,015,000
Kansas City total	60,162,000

St. Joseph

	Capacity, bus
*Commander-Larabee Milling Co.	2,250,000
Dannen Grain & Milling Co.	560,000
Hart-Bartlett-Sturtevant Grain Co.	2,500,000
Quaker Oats Co.	2,240,000
Salina Terminal Elevator Co.	1,000,000
Stratton Grain Co.	2,000,000
Feed mills and miscellaneous storage	162,000
Total	10,712,000

*500,000 bus in Elmwood, Kansas.

Enid (Okla.)

Enid has 11 elevators with a combined capacity of 16,058,000 bus. Names of concerns operating and capacity in bushels:

Enid Terminal Elevator (Enid Elevator Corp.)	2,000,000
General Grain Co.	2,000,000
Pillsbury Flour Mills Co.	2,500,000
Salina Terminal Elevator	1,000,000
Union Equity Co-op Exchange—Elevator A	6,050,000
Elevator B	2,000,000
Feed mills and miscellaneous storage	508,000
Total	16,058,000

Fort Worth

Grain elevators at Fort Worth, Texas, with capacities, in bushels:

Bewley Mills	650,000
Burrus Mill & Elevator Co.	4,000,000
Fort Worth Elevators Co.—Katy plant	3,600,000
Rock Island plant	2,200,000
Kimbell Milling Co.	4,000,000
Lone Star Elevator	2,000,000
E. G. Rail Grain Co.	850,000
Transit Grain & Comm. Co.—Elev. "A"	700,000
Universal Mills	850,000
Feed mills and miscellaneous storage	700,000
Total	19,550,000

Omaha

Elevators at Omaha, Neb., including the terminal district of Omaha-Council Bluffs (Iowa), with storage capacity of each, in bushels:

	Capacity, bus
Archer-Daniels-Midland Co.	1,750,000
Butler-Welsh Grain Co.—Gateway	350,000
Milwaukee "A"	600,000
"R. I"	1,100,000
Cargill, Inc.	10,000,000
Continental Grain Co.	1,450,000
Loveland Elevator Co.	450,000
Maney Milling Co. "A"	750,000
Nebraska Consolidated Mills Co.	600,000
Nebraska-Iowa Grain Co.	1,200,000
Omaha Elevator Co.	2,500,000
Omar, Inc.	800,000
Rosenbaum Bros.	1,000,000
Updike Grain Corp. "D"	2,500,000
Westcentral Co-op. Grain Co. "A"	1,750,000
Feed mills and miscellaneous storage	560,000
Total	27,360,000

Wichita

Wichita has 13 elevators, with a combined capacity of 15,995,000 bus. Names of concerns operating and capacity in bushels:

Consolidated Flour Mills Co.	1,000,000
Farmers Co-op Commission	750,000
Kansas Milling Co.	2,360,000
Pillsbury Flour Mills	2,250,000
Public Terminal Elevator	2,425,000
Red Star Milling Co.	4,150,000
Wichita Flour Mills	1,000,000
Wichita Terminal Elevator	2,000,000
Feed mills and miscellaneous storage	120,000
Total	15,995,000

ATLANTIC SEABOARD ELEVATORS

New York

Name—	Capacity, bus
New York State Canal Grain Elevator	2,000,000
West Shore, Weehawken	2,000,000
Lehigh Valley R. R.	450,000
Total	4,450,000

Boston

	Capacity, bus
Boston & Maine	1,500,000
Boston & Albany (N. Y. C., Lessee)	1,000,000
Totals	2,500,000

Philadelphia

	Capacity, bus
Port Richmond	2,500,000
Girard Point	2,225,000
Twentieth Street	250,000
Total, bus	4,975,000

Baltimore

	Capacity, bus
Locust Point—B. & O. R. R.	4,000,000
Canton—Pennsylvania R. R. Co.	4,250,000
Port Covington—W. Maryland Ry.	4,000,000
2 Miscellaneous	500,000
Total, bus	12,750,000

Hampton Roads

Norfolk and Newport News, Va.

	Capacity, bus
Norfolk Municipal, operated by Norfolk & Western	500,000
Norfolk & Western, Norfolk, operated by Davis Milling Co.	225,000
Total	725,000

LAKE PORT ELEVATORS

Chicago Private

Grain warehouses in the Chicago district, except those declared "regular" under the rules of the Chicago Board of Trade, and those under federal license, whose certificates are accepted for delivery on Chicago Board of Trade contracts, Jan. 3, 1942, with capacities:

Operated by—	Bus
†E. R. Bacon Grain Co.	1,200,000
†Chicago Grain Corp., Irondale	856,000
Columbia Malting Co.	750,000
Corn Products Refining Co.	1,500,000
B. A. Eckhart Milling Co.	950,000
†Gerstenberg & Co. (3)	1,025,000
Glidden & Co.	2,100,000
Fleischmann Malting Co.	2,000,000
Hales & Hunter (2)	2,500,000
†Norris Grain Co. (3)	1,891,000
*Rosenbaum Bros. Belt	1,500,000
A. Schwill & Co.	3,000,000
Spencer Kellogg & Sons, Inc.	1,050,000
Feed mills and miscellaneous storage	2,480,000
Total	22,802,000

*Operated under custodian rule of Board of Trade. †Part custodian.

PREVIOUS TOTALS

1941	25,302,000	1932	34,016,000
1940	24,811,000	1931	34,201,000
1939	24,820,000	1930	34,673,000
1938	27,658,000	1929	35,073,000
1937	43,296,000	1928	34,123,000
1936	38,052,000	1927	35,065,000
1935	38,626,000	1926	34,905,000
1934	34,644,000	1925	39,835,000
1933	33,144,000		

Chicago Public

Regular warehouses for storage of grain under the rules of the Chicago Board of Trade on Jan. 3, 1942, with capacities in bushels:

Under state supervision, regular for delivery on Chicago Board of Trade contracts.

	Bus
Norris Grain Co.—	
Central Elevator A (part of)	607,000
Norris Elevator (part of)	1,052,000
Chicago Grain Corp.—	
Irondale Elevator A (part of)	1,544,000
Edward R. Bacon Grain Co.—	
Keystone Elevator (part of)	550,000
J. J. Badenoch Co.—	
*Badenoch (part of)	500,000
Total, state supervision	4,253,000

*Under U. S. supervision, but not regular for delivery on Board of Trade contracts.

Under federal license; certificates accepted for delivery on Chicago Board of Trade contracts under Commodity Exchange Act, section 5A (7):

	Bus
General Mills, Inc., Star Grain Division—Rialto Elevator	2,500,000
Santa Fe Elevator Corp.—	
Santa Fe Elevator	1,800,000
Rosenbaum Bros.—	
Calumet Elevators	2,800,000
Cargill, Inc.—	
C. & N. W. Terminal and Annex	10,564,000
Norris Grain Co.—	
Wabash Elevator	1,500,000
Continental Grain Corp.—	
Rock Island Terminal	4,000,000
Rosenbaum Bros.—	
National Elevator	750,000
*New York Central	1,250,000
*Norris Grain Co.—	
Elevator J	750,000
*Rosenbaum Bros.—	
Erie Elevator	500,000
*Stratton Grain Co.—	
Dickinson	750,000
Total, federal license	27,164,000
Total, all public elevators	31,417,000

*Federal license, but not regular for delivery on Chicago Board of Trade contracts.

PREVIOUS TOTALS

1941	28,917,000	1932	18,713,000
1940	26,418,000	1931	18,463,000
1939	29,407,000	1930	18,580,000
1938	26,568,000	1929	18,130,000
1937	12,068,000	1928	19,130,000
1936	15,912,000	1927	16,430,000
1935	14,678,000	1926	13,300,000
1934	17,660,000	1925	15,300,000
1933	19,660,000		

Milwaukee

Archer-Daniels-Midland Co.	425,000
C., M., St. P. & P.	3,000,000
Froedtert Grain & Malting Co.	6,825,000
Krause, Charles A., Milling Co.	550,000
Kurth Malting Co.	3,000,000
Ladish-Stoppenbach	3,500,000
Milwaukee Western Malt Co.	1,600,000
Pabst Corp.	1,400,000
Riebs Co. (two)	975,000
Schlitz, Joseph, Brewing Co.	2,250,000
Stratton Grain Co. (two)	3,900,000
Weschler, D. D., & Sons, Inc.	925,000
Six smaller elevators operated in connection with industries	790,000
Total	29,140,000

Toledo

	Capacity, bus
Cargill Toledo Elevator	3,139,000
B. & O. Elev. (Norris Grain Co.)	500,000
East Side Iron—East Side Iron Elevator Co. (Norris Grain Co.)	1,500,000
National Milling Branch of National Biscuit Co.	4,400,000
Nine elevators operated in connection with flour mills and for soybeans, beans, etc.	1,850,000
Total, bus	11,389,000

Buffalo

LAKE ELEVATORS

	Capacity, bus
Standard	5,000,000
Concrete—Central	4,500,000
Superior (Cargill)	3,250,000
Dellwood	1,700,000
Cargill Electric	7,550,000
American	3,250,000
Seneca	1,000,000
Mutual	2,500,000
Co-op. G.L.F.	750,000
Kellogg	1,100,000
Marine "A"	2,100,000
Great Eastern (Cargill)	2,250,000
Dakota	1,250,000
Frontier	4,750,000
Connecting Terminal	1,048,000
Monarch	500,000
Canadian Pool Terminal	2,000,000
Lake and Rail	5,000,000
Total	49,498,000

RAIL ELEVATORS

Black Rock	750,000
Eastern States Mill	1,000,000
Hecker H-O Co.	800,000
Meyer Malt & Grain	750,000
Perot Sons	950,000
Ralston Purina Checkerboard	1,500,000
12 elevators operated in connection with industries	2,155,000
Total	7,905,000
Grand total, 36 elevators	57,403,000

Duluth-Superior

Public and private elevators, with capacities, in bushels:

Consolidated Elevator Co.	8,200,000
Globe Elevator Co.	4,000,000
Great Northern Elevators	11,000,000
Itasca Elevator Co.	2,400,000
Superior Terminal Elevator Co.	3,200,000
Capitol Elevator Co.	4,000,000
King Midas Flour Mills	1,400,000
Duluth Universal Milling Co.	25,000
Duluth Peavey Terminal	6,000,000
Kellogg Elevator	1,250,000
Occident Terminal Co.	4,500,000
Farmers Union Grain Terminal	4,500,000
Total	50,415,000

Minneapolis Elevators

Public and private elevators with owners and capacities:

"REGULAR" ELEVATORS

	Capacity, bus
Archer-Daniels-Midland Co. (four)	15,659,700
Atlantic Elevator Co.	500,000
Brooks Elevator Co.	3,100,000
Bunge Elevator Corp.	2,500,000
Cargill, Inc.	3,840,000
Cereal Grading Co.	950,000
Continental Grain Co.	1,250,000
Gregory-Jennison Co.	1,200,000
Leval & Co., Inc.	4,000,000
Hallet & Carey Elevator Co.	1,300,000
International Milling Co.	1,250,000
Osborne-McMillan Elevator Co. (two)	3,700,000
Russell-Miller Milling Co.	4,200,000
Searle Grain Co.	2,000,000
Spencer Kellogg & Sons, Inc.	1,000,000
Twin City Trading Co.	2,088,000
Van Dusen Harrington Co. (eleven)	15,620,000
Victoria Elevator Co.	650,000
Total	64,807,700

PUBLIC BUT NOT "REGULAR"

Atkinson Milling Co.	330,000
Commander-Larabee Milling Co.	2,245,350
Farmers Union Grain Co., Terminal Ass'n	1,300,000
General Mills, Inc.	1,000,000
Total	4,875,350

PRIVATE AND "NONREGULAR" ELEVATORS

Archer-Daniels-Midland Co. (three)	4,451,000
Atkinson Milling Co.	490,000
Commander-Larabee Milling Co.	488,000
Fleischmann Malting Co. (three)	3,250,000
General Mills, Inc.	4,750,000
Hales & Hunter (Belco No. 1 and 2)	1,500,000
King Midas Flour Mills	300,000
Kurth Malting Co.	1,000,000
Pillsbury Flour Mills Co. (three)	3,425,000
Rahr Malting Co.	1,500,000
Spencer Kellogg & Sons, Inc.	2,175,000
Standard Milling Co.	1,150,000
9 Additional feed mills and miscellaneous storage	1,411,000
Total	25,890,000
*Grand total	95,573,050

*In addition there are 7 Duluth-Superior elevators, having a capacity of 44,400,000 bus, which are "regular" under rules of the Minneapolis Chamber of Commerce.

GULF SEABOARD ELEVATORS

Galveston

	Capacity, bus
Elevator B—Galveston Wharf Co.	5,865,000
Star Mill—Texas Star Flour Mills.	500,000
Sunset—Sunset Elevator Co.	1,000,000
Total	7,365,000

New Orleans

	Capacity, bus
Dock Board Elevator	2,622,000
New Basin—J. T. Gibbons	250,000
Total	2,872,000

CENTRAL STATES ELEVATORS

Cincinnati

	Capacity, bus
Early & Daniel Co.	2,299,850
13 smaller elevators operated in connection with industries	1,990,650
Totals	4,290,500

Nashville

	Capacity, bus
14 Elevators for miscellaneous storage and operated in connection with industries	2,105,000

Indianapolis

	Capacity, bus
Acme-Evans Co.	1,250,000
Cleveland Grain Co.	1,750,000
Early & Daniels Co.	1,000,000
Evans Milling Co.	600,000
Indianapolis Public Elevator Co.	1,500,000
3 miscellaneous	300,000
Total	6,400,000

Cleveland

	Capacity, bus
Montana Flour Mills Co. (A and B).	625,000
Sheets Elevator Co.	200,000
2 Miscellaneous	70,000
Total	895,000

Detroit

	Capacity, bus
Public elevators	500,000
Private elevators	1,100,000
Total, bus	1,600,000

Evansville

	Capacity, bus
Igleheart Bros., Inc., and Associated companies	1,500,000
5 miscellaneous elevators	485,000
Total	1,985,000

St. Louis Elevators

St. Louis elevators, with concerns operating, exclusive of flour mills:

	Capacity, bus
Cargill "A"—Cargill, Inc.	5,000,000
Cargill "B"—Cargill, Inc.	150,000
Continental Grain Co.—	
Missouri Pacific	3,800,000
Elevator "C"	700,000
Continental	700,000
Brooklyn	750,000
Terminal	100,000
Cornell—Cornell Seed Co.	350,000
Burlington—Norris Grain Corp.	2,250,000
Mississippi—Mississippi Elev. Co. (Alton, Ill.)	350,000
Anheuser-Busch Brewing Assn.	1,500,000
Checkerboard "A"—Checkerboard Elevator Co.	1,250,000
Feed mills—Smaller storage (18)	1,670,500
	18,570,500

ST. LOUIS FLOUR MILL STORAGE

Baur Flour Mills Co.	75,000
Saxony Mills	100,000
Valier & Spies Milling Corp.	1,000,000
Russell-Miller Milling Co. (Standard-Tilton Mlg. Co., Alton, Ill.).	525,000
J. F. Imbs Milling Co. (Belleville, Ill.)	350,000
	2,050,000
St. Louis total	20,620,500

PACIFIC COAST ELEVATORS

California

Elevator capacities at San Francisco and neighboring points are:

	Capacity, tons
San Francisco	90,000
At Oakland—	
Albers Bros. Milling Co.	35,000
West Coast Wharf & Storage Co.	*1,250,000
Stockton	109,500
Miscellaneous—	
Grangers Warehouse at Eckley	50,000
Sperry Flour Co. at South Vallejo.	30,000
Miscellaneous space	10,000

*In bushels.

Seattle

Bulk and sacked grain storage capacities in bushels:

	Bulk	Sacked
Hanford Street Elevator.	1,500,000	.....
Hanford Street Dock	.....	500,000
Bell Street Dock	.....	250,000
Spokane Street Dock	.....	250,000
Fisher Flouring Mills Co.	2,600,000	200,000
Novelty Mill Co.	10,000	40,000
Chas. H. Lilly Co.	250,000	130,000
Albers Bros. Milling Co.	750,000	360,000
Totals	5,110,000	1,730,000

Tacoma

Grain storage capacity, in bushels, according to the Tacoma Merchants' Exchange:

	Bulk	Sacked
Tacoma Grain Co.	700,000	33,000
Sperry Flour Co.	1,000,000	.....
Port of Tacoma	600,000	1,115,000
Albers Hay Warehouse	10,000	466,000
Totals	2,310,000	1,614,000

Portland (Oregon)

Eighteen grain warehouses and elevators for miscellaneous storage and operated in connection with industries, in tons:

Albers No. 1	5,000
Albers No. 2	2,000
Albers No. 3	3,000
Crown Mills Dock	10,000
Crown Mills Elevator	19,000
Globe Grain Dock	8,000
Globe Grain Elevator	9,000
Irving Dock	22,000
Albina Dock and Mill	12,000
Pacific Coast Elevator Dock	14,500
Northwestern Dock and Elevator	20,000
Kerr Gifford Dock	16,000
Kerr Gifford Elevator	23,000
Columbia Milling Co.	4,600
Terminal Elevator	60,000
Terminal Dock 4	37,000
Terminal Flour Mills Co.	6,700
Sperry Flour Co.	3,300
Total	275,100

Canadian Upper Lake Terminals

Elevator storage capacity at Fort William and Port Arthur, in bushels:

FORT WILLIAM

On the water front—	Storage capacity, bus
National Grain Co., Ltd.	5,750,000
Canadian Consolidated Grain Co., Ltd., "Empire"	1,750,000
Manitoba Pool Elevator, Ltd., No. 3	1,750,000
Federal Grain, Ltd.	3,000,000
Fort William Elevator Co., Ltd., "F"	1,750,000
Northland Terminals, Ltd.—"D"	7,500,000
"B" and "E"	2,500,000
Ogilvie Flour Mills Co., Ltd.	3,000,000
N. M. Paterson & Co., Ltd., "O" and Annex "K"	4,000,000
McCabe Bros. Grain Co., Ltd.	1,000,000
Searle Terminal Limited	5,000,000
Western Grain Co., Ltd.	3,100,000
Ogilvie Flour Mills Co., Ltd.—Inland—	180,000
Empress Grain Co., Ltd.	20,000
National Grain Co., Ltd.	85,000
J. W. Davidson	10,000
Total	40,395,000

PORT ARTHUR

On the water front—	
McCabe Bros. Grain Co., Ltd.	3,250,000
Saskatchewan Pool Terminals, Ltd.—	
No. 4	6,568,410
No. 6	7,398,800
No. 7	6,900,000
Manitoba Pool Elevators, Ltd.—	
No. 1	1,300,000
No. 2	1,400,000
Federal Grain, Ltd.	2,350,000
Canadian Consolidated Grain Co., Ltd., "Thunder Bay"	1,500,000
Eastern Terminal Elevator Co., Ltd.	5,500,000
Federal Grain, Ltd.	2,250,000
Reliance Grain Co., Ltd.	3,550,000
Superior Elevator Co., Ltd., "P&H"	900,000
Manitoba Pool Terminals, Ltd.—	
No. 9	2,000,000
United Grain Growers Terminals, Ltd.	5,500,000
Saskatchewan Pool Elevators, Ltd.—	
No. 5	2,100,000
Total	52,467,210
Grand total	92,852,210

Eastern Canada Elevators

Location and capacity in bushels of public elevators embraced in the eastern grain inspection division of Canada:

Collingwood, Ont.	2,000,000
Depot Harbor, Ont.	1,600,000
Goderich, Ont.	3,600,000
Halifax, N. S.	2,200,000
Kingston, Ont.	2,750,000
Midland, Ont.	13,650,000
Montreal, Que.	15,912,000
Owen Sound, Ont.	4,000,000
Port Colborne, Ont.	5,250,000
Port McNicoll, Ont.	6,500,000
Prescott	5,500,000
Quebec, Que.	4,000,000
Toronto, Ont.	4,000,000
West St. John, N. B.	2,576,800
St. John, N. B.	500,000
Sarnia, Ont.	3,000,000
Sorel, Que.	3,000,000
Three Rivers	2,000,000
Humberstone, Ont.	2,000,000
Peterborough, Ont.	225,000
Total, bus	84,263,800

Vancouver Elevators

Grain elevators at Vancouver, B. C., with capacities, in bushels:

Alberta Pool Elevators, Ltd., No. 1	5,150,000
Alberta Wheat Pool No. 2	1,650,000
United Grain Growers Terminals, Ltd.	2,705,000
Midland Pacific Terminal, Ltd.	1,500,000
Pacific Elevators Annex	200,000
Pacific Elevators, Ltd.	7,111,500
Atlas Flour Mills, Ltd.	30,000
Brackman-Ker Milling Co.	30,000
Buckerfield's, Ltd., No. 1	520,000
McLellan & McCarter, Ltd.	15,000
Pacific Milling & Grain Co., Ltd.	25,000
United Distillers, Ltd.	35,000
Marpole Grain Co. and Richmond Feed, Ltd.	7,000
Empire Milling Co., Ltd	5,000
James Richardson & Sons, Ltd.	600,000
	19,583,500

Oklahoma Mills' Storage Capacity

Wheat storage capacity of principal Oklahoma mills, showing storage at mill and supplementary storage controlled, in bus:

Town—	No. mills	At mill	Supplementary
Altus	1	500,000	.....
Alva	1	600,000	162,000
Ardmore	1	135,000	.....
Blackwell	1	700,000	110,000
Chickasha	1	500,000	150,000
Edmund	1	200,000	.....
El Reno	2	1,300,000	93,000
Enid	1	2,500,000	.....
Geary	1	75,000	50,000
Hennessey	1	225,000	30,000
Jefferson	1	245,000	25,000
Kingfisher	2	800,000	21,000
Oklahoma City	2	1,360,000	43,000
Okeene	1	350,000	100,000
Ponca City	1	550,000	.....
Shawnee	1	600,000	375,000
Yukon	2	725,000	40,000
	21	11,365,000	1,199,000

Kansas Mills' Storage Capacity

Wheat storage capacity of Kansas mills, outside of Kansas City, showing storage at mills (total of 50,000 bus or more) and supplementary storage controlled, in bushels:

Town—	No. mills	At mill	Supplementary
Abilene	2	1,100,000	400,000
Arkansas City	2	900,000	45,000
Atchison	2	2,000,000	350,000
Beloit	1	120,000	.....
Buhler	1	225,000	25,000
Cherryvale	1	200,000	55,000
Claflin	1	240,000	45,000
Clay Center	1	125,000	.....
Clyde	1	110,000	.....
Coffeyville	1	650,000	100,000
Concordia	1	100,000	.....
Dodge City	1	230,000	150,000
Ellinwood	1	330,000	90,000
Great Bend	2	550,000	85,000
Gypsum	1	225,000	225,000
Hays	1	300,000	300,000
Hudson	1	250,000	150,000
Hutchinson	3	1,780,000	1,690,000
Inman	1	135,000	15,000
Junction City	1	150,000	10,000
Kingman	1	350,000	167,000
Larned	1	200,000	25,000
Lawrence	1	800,000	300,000
Leavenworth	1	250,000	.....
Liberal	1	250,000	170,000
Lindsborg	2	170,000	285,000
McPherson	2	505,000	160,000
Minneapolis	1	20,000	55,000
Moundridge	2	315,000	85,000
Newton	4	2,016,500	893,700
Norton	1	60,000	40,000
Ottawa	1	150,000	.....
Pleasanton	1	50,000	.....
Russell	1	180,000	90,000
Salina	5	5,375,000	2,750,000
Sterling	1	500,000	.....
Topeka	2	600,000	100,000
Wellington	1	800,000	225,000
Whitewater	1	420,000	22,000
Wichita	3	7,450,000	853,000
Wilson	1	130,000	120,000
Winfield	1	425,000	545,000
Totals	61	30,736,500	10,620,000

Canadian Licensed Elevators

Number and capacity of elevators in Canada which handle grain, summarized by provinces, season of 1940-41:

Manitoba—	Elevators	Capacity
Public country	703	23,918,000
Private country	2	70,000
Mill	6	1,775,000
Private terminals	3	2,465,000
Semi-public terminal	2	3,500,000
	716	31,728,000
Saskatchewan—		
Public country	3,191	102,229,000
Private country	1	25,000
Mill	6	4,400,500
Private terminal	1	100,000
Public terminal	2	11,000,000
	3,201	117,754,500
Alberta—		
Public country	1,747	73,932,250
Private country	3	205,000
Mill	11	3,196,000
Private terminal	4	1,495,000
Semi-public terminal	1	50,000
Public terminal	3	6,100,000
	1,769	84,978,250
British Columbia—		
Public country	25	889,000
Mill	9	883,110
Semi-public terminal	9	20,674,500
Public terminal	1	1,250,000
	44	23,701,610
Ontario—		
Public country	4	60,000
Mill	3	1,480,000
Private terminal	2	485,000
Semi-public terminal	27	92,567,210
Eastern	19	54,075,000
	55	148,667,210
Eastern—		
Quebec	8	24,912,000
New Brunswick	3	3,076,800
Nova Scotia	1	2,200,000
	12	30,188,800
Grand totals	5,797	437,018,370

Nebraska Mills' Storage Capacity

Wheat storage capacity of principal Nebraska mills, showing storage at mill and supplementary storage controlled, in bushels:

Town—	No. mills	At mill	Supplementary
Chadron	1	75,000	.....
Crete	1	1,000,000	150,000
Fairbury	1	65,000	15,000
Fremont	1	185,000	.....
Grand Island	1	325,000	.....
Hastings	1	150,000	.....
Holdrege	1	125,000	25,000
Humboldt	1	70,000	50,000
Lexington	1	75,000	200,000
Lincoln	1	1,850,000	.....
Neligh	1	60,000	.....
Norfolk	1	75,000	.....
Omaha	3	2,580,000	.....
Scribner	1	75,000	.....
Superior	1	60,000	.....
Wymore	1	40,000	70,000
Totals	18	6,810,000	510,000

Texas Mills' Storage Capacity

Wheat storage capacity of principal Texas mills, showing storage at mill and supplementary storage controlled, in bushels:

Town—	No. mills	At mill	Supplementary
Amarillo	1	1,200,000	84,000
Brownwood	1	500,000	.....
Clifton	1	600,000	.....
Dallas	2	1,000,000	.....
Denton	2	625,000	30,000
El Paso	1	250,000	.....
Fort Worth	3	5,500,000	250,000
Gainesville	1	500,000	25,000
Galveston	1	500,000	.....
Graham	1	450,000	.....
Greenville	1	1,300,000	.....
Hereford	1	630,000	30,000
Houston	1	1,500,000	4,000,000
Jacksboro	1	175,000	.....
McKinney	1	500,000	.....
New Braunfels	1	500,000	.....
San Antonio	1	500,000	.....
Seguin	1	275,000	.....
Sherman	2	1,125,000	.....
Stamford	1	60,000	.....
Wolfe City	1	250,000	.....
	26	17,940,000	4,419,000

Winnipeg Elevators

Grain elevators at Winnipeg and surrounding territory with capacities, in bushels:

WINNIPEG

	Capacity, bus
Ogilvie Flour Mills Co., Ltd.—Two mills	575,000
Canada Malting Co., Ltd.—Private terminal	1,340,000
Laing Bros., Ltd.—Private country	10,000
Canada Paint Co., Ltd.—Mill	75,000
Manitoba Feed Supply Co.—Country elevator	40,000
Federal Grain, Ltd.—Country elevator	60,000
Soo Line Mills, Ltd.—Country elevator	60,000
Steele, Briggs Seed Co., Ltd.—Mill	5,000
Canada West Grain Co., Ltd.—Country elevator	55,000
Total	2,220,000

TRANSCONA

Dominion Malting Co., Ltd.—Private terminal	1,000,000

NORTH TRANSCONA

Eastern Terminal Elevator Co., Ltd.—Semi-public terminal	1,000,000

ST. BONIFACE

Dominion Linseed Oil Co., Ltd.—Mill	70,000
Western Canada Flour Mills Co., Ltd.—Mill	1,050,000
Canada West Grain Co., Ltd.—Country elevator	150,000
Red River Grain Co., Ltd.—Private terminal	125,000
McCabe Bros. Grain Co., Ltd.—Country elevator	100,000
Grande Prairie Grain Co., Ltd.—Country elevator	80,000
St. Boniface Grain & Feed Co., Ltd.—Country elevator	167,000
Central Grain Co.—Country elevator	43,000
Searle Grain Co., Ltd.—Country elevator	105,000
*Soubry Grain & Feed Co., Ltd.	25,000
	1,915,000
Grand totals	6,135,000

*Not licensed.

Note: Temporary storage facilities not included.

Western Canada Grain Storage

Elevator capacity in use for a series of years, including storage at Port Arthur, Fort William, Keewatin, Kenora, and points in Manitoba, Alberta, Saskatchewan and British Columbia, in bushels:

1941	424,493,047	1925	227,914,620
1940	341,625,770	1924	216,994,620
1939	340,160,420	1923	203,927,420
1938	338,941,820	1922	197,453,420
1937	340,730,120	1921	197,033,620
1936	341,976,680	1920	192,451,970
1935	343,253,660	1919	189,489,964
1934	342,933,460	1918	172,370,000
1933	341,524,260	1917	163,144,000
1932	338,623,260	1916	158,181,000
1931	326,082,210	1915	139,429,000
1930	305,744,790	1914	112,622,000
1929	305,744,790	1913	91,371,000
1928	243,508,200	1912	89,777,000
1927	238,636,560	1911	84,971,000
1926	229,790,620	1910	77,901,000

MOVEMENT OF GRAIN, FLOUR AND FEEDINGSTUFFS IN THE UNITED STATES

A Section Devoted to Statistics Dealing With the Receipt and Shipment of Grain and Its Products at the More Important Distributing Centers of the United States

WHEAT MOVEMENT AT CENTERS

Receipts and shipments of wheat at leading United States centers, by calendar years, in bushels (000's omitted):

RECEIPTS

	1941	1940	1939	1938	1937	1936	1935	1934	1933
Chicago	22,050	28,164	26,710	30,069	38,106	23,482	21,701	23,780	13,501
New York	26,744	13,430	21,296	8,042	12,202	25,535	19,934	21,252	23,404
Minneapolis	134,375	113,373	94,301	60,191	52,389	45,828	61,471	42,910	64,076
Duluth-Superior	65,844	55,306	49,074	52,565	30,933	11,892	20,068	23,637	45,902
Boston	7,052	4,241	3,575	230	118	929	1,073	464	1,000
Toledo	16,861	13,453	13,305	12,247	10,169	10,940	12,546	11,275	11,420
Indianapolis	5,497	5,621	5,386	4,019	4,301	4,094	4,828	5,066	4,235
St. Joseph	7,908	9,278	11,280	10,546	13,840	8,362	6,864	5,744	6,974
Omaha	22,336	14,983	21,567	23,698	22,618	20,815	16,489	15,427	14,674
Kansas City	84,781	69,918	80,549	99,621	96,083	63,744	49,701	44,058	49,115
Baltimore	20,526	12,282	12,083	2,554	3,129	2,109	4,067	3,369	2,117
St. Louis	15,035	19,501	26,753	21,153	22,396	14,916	12,007	15,778	15,810
Philadelphia	6,939	10,903	6,321	2,519	1,372	1,395	2,402	2,272	1,492
Cincinnati	5,499	5,278	6,045	4,013	4,195	4,257	4,635	3,419	4,621
Milwaukee	4,033	2,070	4,100	5,197	6,674	3,684	4,379	4,328	2,143
New Orleans	2,060	109	¶4,038	¶5,207	¶1,414	213	650	168	636
Fort Worth	11,139	8,024	14,105	16,176	15,349	5,198	4,491	8,138	8,505
Seattle*	8,582	7,255	8,516	8,556	8,485	6,063	6,482	9,162	8,857
Tacoma*	9,081	9,042	10,287	9,016	6,193	7,559	9,368	8,875	7,580
Portland, Oregon	14,702	16,085	28,658	32,547	18,486	15,125	15,162	26,048	23,786
San Francisco†	...	...	...	1,630	1,146	906	1,229	1,204	1,871
Buffalo‡	89,509	82,027	103,805	69,904	54,050	77,396	87,438	86,590	87,972
Memphis	909	284	516	612	259	153	126	228	90

SHIPMENTS

	1941	1940	1939	1938	1937	1936	1935	1934	1933
Chicago	13,442	20,087	23,395	25,170	32,009	20,762	14,520	18,011	16,282
New York	23,644	15,766	15,131	10,509	18,557	20,733	18,279	26,908	20,104
Minneapolis	32,267	26,138	26,607	27,763	19,180	22,699	26,269	22,600	26,697
Duluth-Superior	49,998	49,194	43,076	39,286	31,402	25,485	20,265	32,230	44,998
Boston	7,332	4,228	1,652	229	...	2,221	...	1,026	1,262
Toledo	6,348	4,703	4,203	4,303	3,104	4,589	5,691	5,688	4,440
Indianapolis	2,700	1,730	2,183	2,346	2,073	2,565	2,501	2,381	2,746
St. Joseph	3,804	7,224	7,945	10,262	8,507	6,538	4,716	5,965	6,112
Omaha	9,703	7,026	9,441	14,306	13,650	12,557	9,348	9,292	15,821
Kansas City	47,191	33,975	47,139	51,190	53,121	32,352	26,556	31,344	26,932
Baltimore	14,819	14,521	3,137	547	254	4,067	296	280	255
Philadelphia	5,279	11,276	2,680	938	1,166	852	241	1,170	541
Cincinnati	5,089	5,073	4,772	3,984	3,320	3,524	4,572	3,411	4,544
Milwaukee	1,788	1,788	4,279	7,048	4,708	4,660	3,944	3,467	6,374
New Orleans	166	224	60	35	39	198	299	116	787
Portland, Oregon	1,352	8,661	23,942	17,641	10,863	6,077	3,360	17,764	9,688
Fort Worth	5,444	5,910	9,586	12,738	7,515	1,788	2,014	3,098	3,578

*Carloads, 000's not omitted. †Centals of 100 lbs, 000's omitted. ‡Lake receipts only. ¶Includes barge receipts.

FLOUR MOVEMENT AT CENTERS

Receipts and shipments of wheat flour at leading United States centers, by calendar years, in barrels (000's omitted):

RECEIPTS

	1941	1940	1939	1938	1937	1936	1935	1934	1933	1932
Chicago	10,084	10,895	11,575	10,969	10,325	10,612	9,365	8,956	8,849	8,790
New York*	8,080	8,230	8,273	7,782	7,269	7,928	6,222	6,326	6,269	7,127
Minneapolis	†...	†...	†...	483	482	472	315	326	312	345
Boston	936	1,008	1,026	1,030	1,028	1,222	1,176	1,113	1,115	1,253
Baltimore	980	655	823	890	683	696	575	614	663	684
Philadelphia	7,777	1,708	1,694	1,524	1,498	1,555	1,357	1,260	1,363	1,766
Milwaukee	936	840	861	900	761	821	734	774	668	965
New Orleans	†...	†...	†...	†...	†...	†...	†...	703	764	1,048
Portland, Oregon	910	1,106	1,226	802	908	974	1,252	635	1,448	1,085
San Francisco	...	...	...	...	1,968	2,323	3,349	2,938	2,706	2,997

SHIPMENTS

	1941	1940	1939	1938	1937	1936	1935	1934	1933	1932
Chicago	5,637	6,296	7,284	7,051	6,589	7,426	6,598	6,033	5,448	5,192
New York	†...	2,005	2,385	2,288	2,427	2,580	2,383	2,364	2,107	905
Minneapolis	5,871	5,876	6,365	6,270	6,249	7,162	7,018	7,549	7,595	7,685
Boston	..	1	5	5	10	4	5	13	27	129
Baltimore	..	..	46	59	28	16	19	11	22	45
Philadelphia	13	10	1	9	6	2	1	2	1	8
Milwaukee	362	281	150	48	260	12	11	202	97	375
New Orleans	†...	†...	†...	†...	†...	198	159	204	317	518
Portland, Oregon	692	3,462	2,156	2,073	1,967	730	142	1,986	1,993	1,837
St. Joseph, Mo.	1,108	897	869	963	951	1,006	1,103	976	1,065	1,057

*Not including coastal receipts. †Not available.

New Orleans Grain and Flour Movement

Receipts and shipments (by rail and water) at New Orleans, La., by calendar years (000's omitted):

RECEIPTS

	Wheat bus	Flour bbls	Corn bus	Oats bus	Barley bus
1941†.	2,060	*..	1,615	436	..
1940†.	109	*..	5,223	522	6
1939†.	4,038	*..	11,807	152	..
1938†.	5,207	*..	38,672	191	..
1937†.	1,414	*..	12,378	372	..
1936..	213	*..	807	54	6
1935..	650	*..	2,042	3,465	..
1934..	168	703	3,634	2,316	22
1933..	636	764	5,300	1,224	7
1932..	978	1,048	5,832	582	4
1931..	4,678	1,413	1,144	829	15
1930..	12,930	2,217	1,034	647	15
1929..	7,313	2,023	6,402	1,039	976
1928..	5,787	1,955	9,088	1,071	3,699
1927..	*...	1,463	*...	*...	*...
1926*.	....	....	....	....	....
1925..	13,530	2,522	5,757	1,121	78
1924..	23,209	4,226	5,042	551	4
1923..	10,429	3,037	9,132	703	51

†Includes barge receipts.

SHIPMENTS

	Wheat bus	Flour bbls	Corn bus	Oats bus	Barley bus
1941†.	166	*..	1,259	228	..
1940†.	224	*..	2,134	268	..
1939..	60	*..	1,328	100	..
1938..	35	*..	609	82	..
1937..	39	*..	6,487	134	5
1936..	198	148	822	88	9
1935..	299	159	1,471	2,052	23
1934..	116	204	85	90	..
1933..	787	317	3,823	521	..
1932..	4,550	518	192	668	..
1931..	7,159	917	159	294	112
1930..	9,703	1,931	156	286	68
1929..	6,286	1,929	8,466	761	925
1928..	6,332	1,666	6,488	680	2,945
1927..	*...	2,178	*...	*...	*...
1926*.	....	....	....	....	....
1925..	15,094	2,277	5,108	1,106	14
1924..	21,286	3,647	5,609	520	4
1923..	11,535	2,757	10,092	680	1,414

*Not available. †Shipments by train, steamship, barge and truck.

New Orleans Grain Exports

Exports of grain from New Orleans, by calendar years, in bushels (000's omitted):

	Wheat	Barley	Corn	Oats	Rye
1941.....	216	..	75	70	..
1940.....	563	..	3,187	9	..
1939.....	4,379	..	10,591	94	..
1938.....	6,151	96	35,028	385	22
1937.....	1,121	..	..	..	..
1936.....	53	..	12	55	..
1935.....	38	22	18	362	..
1934.....	116	..	85	90	..
1933.....	406	..	1,180	194	..
1932.....	4,994	..	188	488	..
1931.....	7,159	112	159	294	..
1930.....	9,703	68	156	286	1
1929.....	6,286	925	8,466	761	71
1928.....	6,332	2,945	6,448	680	971
1927.....	9,852	..	3,292	1,187	983
1926.....	6,023	..	6,045	823	294
1925.....	15,094	..	5,108	1,105	94
1924.....	21,286	..	5,527	521	137

Minneapolis Grain and Flour Movement

Receipts and shipments at Minneapolis, by crop years, ended July 31, prior to 1939-40, crop year ended Aug. 31 (000's omitted):

RECEIPTS

	1940-41	1939-40	1938-39	1937-38
Wheat, bus..	124,896	102,717	106,730	52,134
Corn, bus....	20,865	17,471	19,896	29,023
Oats, bus....	23,771	25,900	20,852	23,094
Barley, bus..	45,555	49,149	39,827	35,607
Rye, bus	11,474	12,212	11,670	8,111
Flaxseed, bus	19,646	13,082	4,482	5,157
Flour, bbls...	*..	*..	*..	457
Millfeed, tons	*..	*..	*..	24

SHIPMENTS

	1940-41	1939-40	1938-39	1937-38
Wheat, bus..	27,167	27,516	33,482	23,275
Corn, bus....	17,247	14,232	15,436	21,768
Oats, bus....	19,091	20,453	16,797	17,436
Barley, bus..	31,358	34,037	30,374	30,259
Rye, bus	5,883	5,772	4,253	5,471
Flaxseed, bus	3,367	2,738	900	972
Millfeed, tons	356	354	362	324
Flour, bbls...	5,849	6,053	6,878	6,000

*Figures not available.

MINNEAPOLIS GRAIN, FLOUR AND FEED MOVEMENT

Receipts and shipments of grain, flour and millfeed at Minneapolis, by calendar years (000's omitted):

RECEIPTS

	Flour, bbls	Millfeed, tons	Wheat	Corn	Oats	Barley	Rye	Flaxseed	Totals, grain
			Bushels						
1941.....	*..	*..	134,375	16,205	32,450	54,215	18,941	19,685	275,869
1940.....	*..	*..	113,373	19,656	21,146	39,721	8,762	16,148	218,806
1939.....	*..	*..	94,301	18,069	26,555	49,504	12,587	12,593	213,609
1938.....	483	22	60,191	30,619	17,157	36,114	9,061	4,953	158,095
1937.....	482	27	52,389	13,065	22,074	29,466	7,730	7,149	131,873
1936.....	472	27	45,828	10,446	21,166	35,859	6,124	4,413	123,836
1935.....	315	19	61,471	5,388	25,871	25,398	4,891	8,955	131,975
1934.....	326	21	42,910	16,167	8,173	23,660	3,185	4,283	98,380
1933.....	312	14	64,076	17,964	22,512	23,613	5,456	4,189	127,810
1932.....	345	17	57,586	6,037	12,504	14,521	4,392	5,186	100,226
1931.....	213	23	74,668	8,081	10,003	13,730	4,443	7,606	118,531
1930.....	222	37	92,833	13,329	17,899	20,162	10,088	8,765	163,076
1929.....	277	53	101,602	12,610	25,042	20,206	7,620	9,013	176,093
1928.....	236	52	126,793	11,941	22,478	28,456	6,713	12,706	209,088
1927.....	333	56	112,886	11,434	21,836	17,406	4,889	12,209	181,049
1926.....	331	36	95,344	9,711	23,199	14,932	4,606	9,460	157,251
1925.....	775	27	108,689	14,025	42,724	24,319	7,600	13,168	210,525

*Figures not available.

SHIPMENTS

	Flour, bbls	Millfeed, tons	Wheat	Corn	Oats	Barley	Rye	Flaxseed	Totals, grain
			Bushels						
1941.....	5,871	400	32,267	21,239	25,589	35,005	7,182	1,900	123,181
1940.....	5,876	362	26,138	12,333	19,413	30,809	5,345	3,266	97,304
1939.....	6,365	345	26,607	16,772	20,437	31,729	5,268	2,268	103,081
1938.....	6,270	307	27,763	21,416	21,302	32,150	4,374	914	107,918
1937.....	6,249	325	19,180	6,682	19,299	24,021	5,882	897	75,962
1936.....	7,162	420	22,699	7,619	17,208	28,501	5,349	1,783	83,159
1935.....	7,018	342	26,269	9,739	16,498	20,675	2,470	1,559	77,210
1934.....	7,549	383	22,600	12,610	16,443	17,170	2,446	977	72,246
1933.....	7,595	376	26,697	11,518	12,770	14,571	3,834	1,467	70,857
1932.....	7,685	388	28,209	2,579	4,448	7,883	2,302	1,809	47,230
1931.....	9,702	521	36,409	6,804	10,113	12,129	3,491	1,953	70,899
1930.....	11,407	649	42,056	9,540	19,439	15,007	4,186	3,099	93,326
1929.....	11,421	698	46,050	8,177	16,602	13,208	5,780	3,347	93,163
1928.....	12,596	774	55,307	9,044	26,208	22,682	4,181	4,578	135,370
1927.....	12,196	718	48,745	6,822	28,360	15,872	6,272	2,651	121,636
1926.....	12,439	631	39,530	6,333	28,171	11,941	2,029	2,307	90,312
1925.....	12,717	650	53,083	11,726	43,521	19,286	2,929	3,013	133,558

MINNEAPOLIS CAR-LOT CALENDAR YEAR SHIPMENTS

Table prepared by H. H. Thomas, of the Soo road, showing car loadings of flour and millfeed by Minneapolis mills for the calendar year ended Dec. 31, 1941, with comparisons:

	Rock Island	C., B.&Q.	C.,M.,St. P. & P.	Oma-ha	Great West	Great North.	M. & St. L.	M., N. & S.	North. Pac.	Soo	Totals
Atkinson Milling Co..	94	78	978	411	72	18	216	81	54	103	2,105
King Midas F. Mills.	10	24	265	337	12	39	152	..	99	180	1,118
Comm.-Lar. M. Co...	69	323	956	737	248	218	265	164	161	262	3,404
Standard Mlg. Co....	106	110	490	698	137	136	336	1	175	567	2,756
Pillsbury Fl. M. Co...	924	782	1,057	1,756	413	1,196	556	..	362	784	7,830
Russell-Miller M. Co.	138	213	371	393	508	137	275	..	99	181	2,315
Minn. Linseed Oil Co.	132	70	362	248	91	35	139	33	16	66	1,192
Washb'n Crosby Co..	989	1,232	1,715	2,220	1,048	827	1,318	3	934	1,604	11,890
Misc. feed mills.....	215	424	1,386	1,256	135	527	229	524	533	664	5,893
Archer Daniels M. Co.	604	500	1,055	1,689	632	394	466	5	157	349	5,851
Spencer Kellogg Co..	697	265	668	788	597	256	287	2	47	165	3,772
Totals, 1941 3,978	4,021	9,303	10,533	3,893	3,784	4,239	813	2,637	4,925	18,126	
Totals—1940 3,470	3,522	8,242	9,049	3,521	3,543	3,797	743	2,610	4,547	13,044	
1939.....3,139	3,467	7,505	8,440	3,383	4,058	3,733	834	2,538	4,493	11,590	
1938.....2,755	3,238	7,224	8,006	3,223	4,060	3,863	534	2,426	4,565	9,894	
1937.....3,188	3,583	7,693	8,507	3,545	3,727	3,998	280	2,122	5,149	11,792	
1936.....3,342	4,260	7,888	9,877	4,192	4,405	3,967	159	2,535	6,288	10,913	
1935.....3,045	3,744	7,236	8,999	4,384	3,998	3,598	21	2,397	5,273	12,657	

FORT WORTH RECEIPTS AND SHIPMENTS

The following tables show receipts and shipments, in carloads, of all principal grains and hay at Fort Worth, Texas, by calendar years:

RECEIPTS

	Wheat	Corn	Oats	Barley	Milo	Kafir	Hay
1941.....	11,139	811	593	417	846	1,066	1
1940.....	8,024	1,202	506	24	279	203	6
1939.....	14,105	613	493	26	246	194	6
1938.....	16,176	803	626	47	419	318	83
1937.....	15,349	1,336	719	30	619	365	67
1936.....	5,198	2,503	558	61	878	538	79
1935.....	4,491	2,345	972	54	421	330	408
1934.....	8,138	2,011	1,275	133	429	513	652
1933.....	8,505	1,215	1,001	106	698	335	72
1932.....	12,996	1,283	1,688	271	1,427	592	42
1931.....	17,156	1,429	1,124	196	736	589	87
1930.....	14,700	2,621	1,187	435	931	902	602
1929.....	20,402	2,945	1,192	871	1,877	2,091	772
1928.....	12,172	3,444	1,392	433	2,105	1,823	825
1927.....	13,752	2,837	2,022	757	2,332	1,348	394
1926.....	15,585	2,119	2,180	295	1,204	679	990

SHIPMENTS

1941.....	5,444	673	168	46	593	376	0
1940.....	5,910	833	343	4	378	181	0
1939.....	9,586	250	214	10	570	163	0
1938.....	12,738	218	58	11	612	215	0
1937.....	7,515	937	108	8	595	250	0
1936.....	1,788	900	212	15	696	302	0
1935.....	2,014	968	346	14	270	128	0
1934.....	3,098	108	387	61	273	142	0
1933.....	3,578	77	407	31	325	94	0
1932.....	6,918	321	536	45	397	149	0
1931.....	6,365	240	168	193	122	56	0
1930.....	4,891	514	258	150	255	423	4
1929.....	6,672	630	151	133	774	734	23
1928.....	5,793	550	324	120	993	762	31
1927.....	3,990	1,145	1,051	384	780	482	8
1926.....	4,567	636	772	134	521	302	18

SOYBEAN MOVEMENT AT CENTERS

Receipts and shipments of soybeans at leading United States centers for 1941 and 1940, in bushels:

	1940 Receipts	1940 Shipments	1941 Receipts	1941 Shipments
Baltimore	441	1,565	356	.....
Indianapolis	1,296	640	1,296,000	1,050,000
Boston	73,878	*77,200	†.....	†.....
St. Louis	920,700	.....	324,000	.....
Toledo	2,371,500	558,245	3,511,500	1,061,100
Milwaukee	305,000	.....	487,000	.....
New Orleans	294,124	907,071	†.....	†.....
Cincinnati	844,000	47,000	646,800	50,400
Minneapolis	141,000	96,000	364,500	3,000
Omaha	274,500	.....	$.....	†.....
Buffalo	47,689	.....	.....	.....
New York	102,000	214,000	.....	.....
Chicago	†.....	153	12,522	3,781

*Exports. †No report.

Portland (Oregon) Grain Receipts

Receipts of grain at Portland, Oregon, by calendar years, in carloads, not including water or truck receipts:

	Wheat	Oats	Barley	Corn
1941....	9,868	330	441	843
1940....	10,723	367	539	903
1939....	19,105	515	528	1,023
1938....	21,698	643	546	974
1937....	12,324	370	733	170
1936....	10,050	374	856	54
1935....	10,830	216	200	48
1934....	17,228	1,120	590	518
1933....	16,404	682	310	660
1932....	13,946	240	156	589
1931....	21,240	561	151	897
1930....	20,524	602	196	1,188
1929....	20,194	634	245	1,448
1928....	23,891	592	164	1,273
1927....	32,613	861	306	1,289
1926....	30,177	743	154	1,031
1925....	14,277	891	385	708
1924....	22,584	647	559	544

Portland (Oregon) Wheat and Flour Movement

Receipts and shipments of wheat and flour at Portland Oregon:

RECEIPTS

	Wheat, bus	Flour, bbls
1941.....	14,702,000	910,400
1940.....	16,084,500	1,105,800
1939.....	28,657,500	1,226,400
1938.....	32,547,000	801,600
1937.....	18,486,000	907,800
1936.....	15,125,000	974,400
1935.....	15,162,000	1,251,975
1934.....	26,047,737	635,250
1933.....	23,785,800	1,447,875
1932.....	19,104,317	1,084,687
1931.....	30,798,030	1,288,350
1930.....	29,759,800	1,122,450
1929.....	28,776,450	1,084,500
1928.....	37,647,400	1,045,800
1927.....	47,288,850	1,232,840
1926.....	42,247,800	947,700
1925.....	19,273,822	760,637
1924.....	30,940,248	682,615

SHIPMENTS, FOREIGN PORTS

1941.....	1,351,693	692,392
1940.....	7,032,863	2,520,352
1939.....	22,180,731	852,568
1938.....	16,487,680	748,047
1937.....	6,276,926	199,209
1936.....	1,502,624	77,714
1935.....	46,611	142,323
1934.....	12,209,815	357,384
1933.....	3,256,480	284,394
1932.....	4,773,131	639,388
1931.....	14,759,394	958,040
1930.....	19,855,713	772,337
1929.....	20,495,294	885,343
1928.....	22,516,014	634,296
1927.....	36,053,336	699,854
1926.....	32,119,091	591,265
1925.....	7,252,402	638,461
1924.....	20,426,482	1,324,876

SHIPMENTS, DOMESTIC PORTS

1941.....	935,785	541,358
1940.....	1,628,044	941,512
1939.....	1,760,720	1,303,675
1938.....	1,153,134	1,325,245
1937.....	4,586,406	1,708,318
1936.....	4,574,703	651,666
1935.....	3,313,286	1,953,382
1934.....	5,554,718	1,628,934
1933.....	6,431,308	1,708,399
1932.....	4,062,295	1,197,583
1931.....	4,749,279	1,221,886
1930.....	1,678,221	1,167,219
1929.....	286,210	1,336,871
1928.....	666,688	1,428,380
1927.....	739,398	1,035,091
1926.....	979,370	1,055,897
1925.....	2,644,901	1,071,223
1924.....	2,520,729	918,371

Boston Receipts and Exports

Receipts (rail and water) and exports of grain and grain products at Boston, Mass., by calendar years, as compiled by the Boston Grain & Flour Exchange (000's omitted):

RECEIPTS

	Flour,	Bushels				
	bbls	Wheat	Corn	Oats	Rye	B'rley
1941.	936	7,052	3	120	6	..
1940.	1,008	4,241	527	642	7	..
1939.	1,026	3,575	451	160	10	3
1938.	1,030	230	19	204	10	3
1937.	1,028	118	5,555	228	7	2
1936.	1,322	929	2,558	251	5	3
1935.	1,176	1,073	2,648	635	7	31
1934.	1,113	464	133	494	1	30
1933.	1,115	1,000	32	220	14	2
1932.	1,353	2,810	24	334	17	..
1931.	1,409	3,153	11	346	18	835
1930.	1,443	853	14	485	17	22
1929.	1,580	1,891	9	690	17	1,089
1928.	1,630	4,006	22	728	131	2,169
1927.	1,532	3,048	24	1,184	267	2,227
1926.	1,660	3,211	164	1,445	38	938
1925.	1,359	2,123	33	1,697	251	1,778
1924.	1,555	1,954	84	2,237	1,034	384

EXPORTS

	Flour,	Bushels				
	bbls	Wheat	Corn	Oats	Rye	B'rley
1941.	..	7,332	..	..	..	..
1940.	1	4,228	933	..	..	..
1939.	5	1,652	..	..	..	..
1938.	5	229	..	..	..	..
1937.	10	..	..	..	..	..
1936.	4	2,221	..	..	..	..
1935.	5	..	..	..	..	..
1934.	13	1,026	..	..	..	..
1933.	27	1,262	..	..	..	..
1932.	129	3,115	..	..	..	..
1931.	264	2,133	..	..	..	771
1930.	267	2,122	..	..	..	21
1929.	329	1,885	..	58	..	1,907
1928.	313	2,239	..	120	164	2,334
1927.	356	2,506	..	39	193	1,720
1926.	490	3,309	43	419	..	1,406
1925.	217	2,107	5	1,128	1,139	2,111
1924.	476	2,918	19	78	424	357

Dockage in Wheat Receipts in United States

A table, prepared by the United States Department of Agriculture, showing the dockage by crop years for all wheat receipts, based on the total of final supervised inspections for each class:

1940 CROP

	Hard red spring		Durum		Amber mixed and mixed durum		Red durum	
% dockage	No. cars	% of total cars	No. cars	% of total cars	No. cars	% of total cars	No. cars	% of total cars
0.	5,009	37.7	652	23.7	160	29.7	181	18.4
1.	5,312	39.9	868	31.5	151	28.1	316	32.1
2.	1,701	12.8	489	17.7	106	19.7	182	18.5
3.	658	4.9	299	10.9	64	11.9	102	10.4
4.	282	2.1	187	6.8	31	5.8	66	6.7
5.	164	1.2	123	4.5	14	2.6	41	4.2
6.	76	.6	64	2.3	4	.7	31	3.2
7.	38	.3	34	1.2	4	.7	22	2.2
8.	23	.2	15	.5	1	.2	17	1.7
9.	13	.1	11	.4	..	..	6	.6
10.	5	..	5	.1	1	.2	7	.7
11.	7	.1	5	.2	..	..	4	.4
12.	4	..	1	..	1	.2	5	.5
13.	..	..	1	..	1	.2	2	.2
14.	3	..	..	..	..	..	..	..
15.	1	..	..	..	..	..	..	..
16.	..	..	..	..	..	..	..	..
17.	..	..	1	..	..	..	1	.1
18.	1	..	..	..	..	..	..	..
20.	1	..	..	..	..	..	..	..
30.	1	..	..	..	..	..	..	..
35.	1	..	..	..	..	..	..	..
Totals—	13,300	..	2,755	..	538	..	983	..

1940 CROP

	Hard red winter		Soft red winter		White wheat		Mixed wheat	
% dockage	No. cars	% of total cars	No. cars	% of total cars	No. cars	% of total cars	No. cars	% of total cars
0	21,337	78.8	6,255	86.7	6,514	65.1	2,257	70.8
1.	4,672	17.2	627	8.7	2,709	27.1	548	17.2
2.	717	2.6	159	2.2	538	5.4	189	5.9
3.	194	.7	75	1.0	133	1.3	96	3.0
4.	67	.2	34	.5	59	.6	34	1.1
5.	30	.1	19	.3	24	.2	22	.7
6.	17	.1	11	.2	9	.1	19	.6
7.	13	..	6	.1	9	.1	7	.2
8.	12	..	13	.2	4	..	4	.1
9.	2	..	5	.1	5	.1	2	.1
10.	8	..	2	..	5	.1	1	..
11.	5	..	3	..	..	..	1	..
12.	2	..	1	..	..	..	2	.1
13.	..	..	..	..	..	..	2	.1
14.	..	..	..	..	..	..	1	..
15.	..	..	..	..	..	..	1	..
17.	..	..	..	..	1	..	..	..
18.	1	..	..	..	..	..	..	..
20.	1	..	..	..	..	..	..	..
22.	2	..	..	..	..	..	..	..
24.	2	..	..	..	..	..	..	..
27.	3	..	1	..	..	..	..	..
32.	1	..	..	..	..	..	..	..
36.	1	..	..	..	..	..	..	..
57.	..	..	..	..	1	..	..	..
59.	1	..	..	..	..	..	..	..
Totals—	27,088	..	7,211	..	10,011	..	3,186	..

Toledo Grain Movement

Receipts and shipments at Toledo, Ohio, by calendar years, in bushels (000's omitted):

RECEIPTS

	Wheat	Corn	Oats	Rye	Barley
1941..	16,861*	4,564	4,846	46	422
1940..	13,453	5,057	5,352	126	306
1939..	13,305	6,717	9,490	211	613
1938..	12,247	6,827	7,119	151	573
1937..	10,169	2,331	5,619	350	257
1936..	10,940	3,210	7,836	272	624
1935..	12,546	1,558	5,380	113	160
1934..	11,275	1,469	5,023	170	260
1933..	11,420	2,010	4,214	53	43
1932..	12,933	2,506	8,175	287	96
1931..	11,902	1,169	7,128	41	77
1930..	12,788	1,203	4,644	55	42
1929..	13,889	1,396	5,400	121	116
1928..	12,250	1,674	5,105	89	299
1927..	16,878	3,113	8,336	226	83
1926..	12,115	4,636	6,949	257	44
1925..	9,262	3,381	9,263	142	46
1924..	13,310	4,055	6,806	915	39
1923..	14,980	3,126	3,968	1,074	58
1922..	9,680	4,092	3,767	847	29
1921..	7,189	3,303	5,785	778	41
1920..	5,034	2,281	4,797	772	45

*Includes 1,407,870 bus by lake.

SHIPMENTS

	Wheat	Corn	Oats	Rye	Barley
1941...	6,348*	3,203	4,038	47	129
1940...	4,703	2,638	4,224	126	156
1939...	4,203	3,801	8,000	111	214
1938...	4,303	4,487	6,059	116	170
1937...	3,104	1,075	4,170	229	258
1936...	4,589	1,914	4,856	148	495
1935...	5,691	545	4,365	58	249
1934...	5,688	510	4,459	160	73
1933...	4,440	1,037	3,777	35	10
1932...	5,419	907	5,648	268	4
1931...	3,773	127	4,903	20	6
1930...	3,053	62	4,669	42	6
1929...	4,473	127	2,199	64	39
1928...	6,318	471	2,250	36	42
1927...	7,565	1,666	4,947	160	13
1926...	3,837	2,702	4,261	142	..
1925...	3,957	1,718	7,794	149	3
1924...	5,830	1,616	2,524	1,050	..
1923...	7,025	1,048	2,650	584	..
1922...	4,007	1,825	1,657	628	..
1921...	2,489	2,478	3,718	637	4
1920...	1,819	765	1,356	1,072	..

*Includes 339,815 bus by lake.

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ALL RISKS

THE SEA INSURANCE CO., LTD.
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Toledo Grain Receipts and Shipments by Lake

Yearly receipts and shipments by lake at Toledo, by calendar years, in bushels (000's omitted):

RECEIPTS

	Wheat	Corn	Oats	Rye	Barley
1941...	1,408	...	...	...	...
1940...	818	...	2,122	...	80
1939...	170	...	5,374	...	100
1938...	530	...	2,163	...	157
1937...	320	268	1,503	...	213
1936...	781	...	2,760	110	494
1935...	1,572	98	2,746	...	75
1934...	1,305	...	2,784	86	218
1933...	1,114	...	2,418	...	...

SHIPMENTS

	Wheat	Corn	Oats	Rye	Barley
1941...	340	...	...	...	...
1939...	206	...	...	...	...
1938...	89	...	...	...	...
1937...	51	...	...	...	...
1936...	606	...	...	...	...
1935...	1,255	...	...	...	...
1934...	314	...	...	...	...
1933...	368	...	...	...	...

No shipments by lake during 1940.

Opening and Closing of Navigation in Canada

Statement of average dates of opening and closing of grain ports in Canada:

Port—	Opening	Closing
Montreal	April 25	Nov. 28
Prescott	April 25	Dec. 10
Kingston	April 20	Dec. 15
Port Colborne (Canal)	April 15	Dec. 1
Toronto	April 5	Dec. 15
Sarnia	April 15	Dec. 10
Goderich	April 20	Dec. 19
Wiarton	April 20	Dec. 10
Owen Sound	April 20	Dec. 10
Collingwood	April 20	Dec. 10
Meaford	April 20	Dec. 10
Midland	April 20	Dec. 10
Parry Sound	April 20	Dec. 10
Sault Ste. Marie	April 20	Dec. 10
Port Arthur	April 25	Dec. 6
Fort William	April 25	Dec. 6

Quebec harbor is usually open all winter, but navigation with lower ports and the sea opens on an average about April 10, and closes about Dec. 10. St. John harbor and Halifax harbor are open all the year round. So also are Vancouver, Prince Rupert and the other Canadian harbors on the Pacific Coast.

United States Population

The estimated population of the United States on April 1, 1941, was 132,818,005, according to the Bureau of the Census, Department fo Commerce. This represents an increase of 1,148,730 (0.87%) over 1940, when the last complete census was taken. This increase is based on the excess of births over deaths, plus the net immigration.

Millers' Mutual Association

The Millers' Mutual Association is the name of the holding company that was formed when the British milling industry was rationalized in 1929. Mills representing 95% of the milling capacity of the country, apart from the mills belonging to the various co-operative wholesale societies, are members of the Millers' Mutual Association. The affairs of the Millers' Mutual Association are controlled by a board of directors and a permanent secretary. The board consists of representatives from each district area. For instance, in England there are four district areas—northwest, northeast, southwest and southeast. In addition to the district area representatives, each of the milling groups—Ranks, Ltd., and Spillers, Ltd.,—are represented on the board. The board meets once a fortnight to administer rules, watch finances, and discuss datum output of the members, which is lowered or raised according to demand. The pool funds of the M.M.A. are used for paying the secretary and staff, and sums of money are allotted for advertising schemes, both for flour and offal. A proportion of the fund is also used for buying up and closing down uneconomical and redundant mills.

Members of the board of management of the M. M. A. are as follows: James V. Rank, chairman, representing Ranks, Ltd., Sir Norman Vernon, representing Spillers, Ltd; W. Hodson, representing the northwestern area; G. F. Sugden, representing the northeastern area; Col. Sir Francis Metford, representing the southwestern area; Guy Savory, representing the southeastern area; and S. Armstrong, representing country members.

London Flour Trade Association

The London Flour Trade Association was founded in 1884. Its membership at the end of 1941 included 68 firms. The principal object of the association is to promote and establish in flour and kindred trades uniformity in common usages, founded upon just and equitable principles, especially with regard to contracts, charter parties, bills of lading and policies of insurance. It also appoints arbitrators and umpires, when necessary, to decide any disputes that may arise in connection with contracts. The association was converted into a limited liability company in 1935. The officers are president, F. W. Peach; vice president, C. E. Feast; secretary, W. T. Odam; treasurer, P. Cooper.

Canadian Inspection Charges

Fees chargeable for the inspection of staple articles under the general inspection and grain inspection acts of Canada:

Inspection of grain: per car, $1; in cargoes, $1 per 1,000 bus.

Weighing of grain: per car, $1; in cargoes, $1 per 1,000 bus.

Inspection of hay: per car, $1.

St. Joseph Grain Movement

Receipts and shipments of wheat, corn and oats at St. Joseph, Mo., by calendar years, in bushels:

RECEIPTS

	Wheat	Corn	Oats
1941	7,908,800	3,807,000	4,964,000
1940	9,278,400	5,776,500	3,218,000
1939	11,280,000	3,501,000	3,942,000
1938	10,545,600	5,214,000	4,520,000
1937	13,840,000	3,388,500	3,646,000
1936	8,361,600	4,825,500	5,662,000
1935	6,864,000	3,361,500	4,760,000
1934	5,744,000	8,601,000	3,758,000
1933	6,964,800	13,195,500	4,558,000
1932	8,564,800	3,805,500	3,772,000
1931	14,578,200	8,970,000	2,834,000
1930	13,183,500	10,885,500	2,348,000
1929	16,152,800	10,323,000	970,000
1928	11,697,000	10,812,000	1,138,000
1927	9,620,800	10,095,000	1,244,000
1926	10,529,400	11,131,500	1,676,000
1925	12,028,800	10,231,500	1,798,000
1924	13,661,400	12,226,500	1,790,000
1923	10,150,000	10,165,000	2,198,000
1922	14,417,200	10,695,000	1,438,000

SHIPMENTS

	Wheat	Corn	Oats
1941	3,804,800	3,444,000	930,000
1940	7,224,000	2,470,500	358,000
1939	7,945,600	2,083,500	994,000
1938	10,262,400	3,532,500	1,172,000
1937	8,537,200	1,525,500	784,000
1936	4,537,600	2,913,000	1,554,000
1935	4,716,800	3,105,000	654,000
1934	5,964,800	7,938,000	1,034,000
1933	6,112,000	8,698,500	1,388,000
1932	7,187,200	2,131,500	632,000
1931	11,084,200	7,579,500	804,000
1930	8,841,000	8,434,500	672,000
1929	5,449,600	7,105,500	212,000
1928	3,406,200	8,799,000	272,000
1927	2,898,000	6,691,500	212,000
1926	2,562,000	7,435,500	632,000
1925	3,936,800	7,527,000	904,000
1924	4,923,800	8,637,000	634,000
1923	4,110,400	7,308,000	974,000
1922	6,092,800	7,962,000	898,000

Shipments of grain products and feed (including feed grains) from St. Joseph, Mo., by calendar years:

	Flour, bbls	Feed, tons
1941	1,107,704	143,747
1940	897,453	112,121
1939	868,631	103,655
1938	963,194	101,791
1937	950,513	115,168
1936	1,006,023	157,357
1935	1,103,125	122,959
1934	975,995	103,323
1933	1,064,832	99,400
1932	1,056,957	86,715
1931	1,349,836	146,457
1930	1,387,520	174,354
1929	2,109,852	225,754
1928	2,156,216	243,866
1927	2,370,401	225,803
1926	2,249,669	211,782
1925	2,006,988	227,011
1924	2,157,225	257,096
1923	1,613,948	237,827
1922	1,867,913	240,238

Primary Grain Market Receipts

Aggregate receipts of wheat, corn and oats at the leading primary markets, as reported by the Daily Trade Bulletin, by crop years, in bushels (000's omitted):

WHEAT (JULY 1-JUNE 30)

	1940-41	1939-40	1938-39	1937-38
Chicago	28,283	26,385	29,561	39,609
Sioux City	2,595	2,399	3,027	2,455
Milwaukee	4,807	4,984	3,947	8,366
Minneapolis	100,487	101,265	84,171	53,576
Duluth	42,545	55,961	57,762	32,894
St. Louis	24,660	24,367	23,347	25,124
Wichita	24,785	19,235	29,161	28,308
Kansas City	86,560	63,947	110,247	105,127
Peoria	2,940	2,816	3,650	2,261
Omaha	16,202	15,092	24,562	22,580
Indianapolis	5,296	5,684	4,000	3,929
St. Joseph	9,118	8,940	11,653	13,175
Totals	348,278	331,015	385,088	337,404

CORN (NOV. 1-OCT. 31)

	1940-41	1939-40	1938-39	1937-38
Chicago	98,191	93,997	90,826	137,549
Sioux City	5,581	5,317	5,120	7,137
Milwaukee	10,040	10,905	7,147	13,212
Minneapolis	13,949	24,650	18,425	32,663
Duluth	19,710	14,018	14,409	30,053
St. Louis	11,896	13,988	13,941	36,323
Wichita	48	61	56	184
Kansas City	8,665	16,540	11,851	13,959
Peoria	33,390	21,320	22,113	27,626
Omaha	12,960	22,055	14,348	21,177
Indianapolis	24,555	18,850	21,272	21,286
St. Joseph	4,303	6,078	4,418	5,455
Totals	243,288	247,779	223,926	346,624

OATS (AUG. 1-JULY 31)

	1940-41	1939-40	1938-39	1937-38
Chicago	20,192	17,150	26,292	27,139
Sioux City	1,429	1,510	1,405	1,117
Milwaukee	549	642	962	1,718
Minneapolis	24,033	25,666	20,680	23,178
Duluth	3,831	11,540	14,420	14,149
St. Louis	3,122	4,071	3,736	5,201
Wichita	8	43	14	32
Kansas City	1,933	1,278	2,967	3,773
Peoria	2,793	3,737	2,839	4,423
Omaha	1,542	2,846	5,324	5,234
Indianapolis	5,982	3,510	6,894	9,339
St. Joseph	4,033	3,005	4,519	3,993
Totals	69,447	74,998	90,052	99,296

Bushels Per Carload

The average number of bushels of grain per carload received at Chicago:

	1941	1940	1939	1938	1937
Wheat	1,586	1,596	1,580	1,561	1,543
Corn	1,624	1,631	1,632	1,594	1,541
Oats	2,251	2,209	2,042	2,055	2,149
Rye	1,558	1,540	1,458	1,450	1,477
Barley	1,800	1,845	1,829	1,610	1,661
Flaxseed	1,449	1,396	1,499	1,558	1,571
Soybeans	1,412	1,431	1,492	1,430	1,453

Oats Receipts at U. S. Primary Markets

Aggregate weekly receipts of oats at 14 United States primary markets, as reported by the Chicago Daily Trade Bulletin, in bushels (000's omitted):

Week ending—	1941	1940	1939	1938
Jan. 3	617	594	1,020	950
Jan. 10	878	923	1,728	1,288
Jan. 17	982	1,385	1,690	2,471
Jan. 24	804	883	1,442	1,348
Jan. 31	562	1,083	1,023	1,004
Feb. 7	677	1,153	1,166	828
Feb. 14	803	1,269	846	1,173
Feb. 20	767	1,254	1,131	867
Feb. 28	851	1,064	1,438	1,367
March 7	953	1,036	1,377	970
March 14	950	1,288	1,103	756
March 21	958	1,001	1,136	943
March 28	1,354	1,071	1,438	1,384
April 4	1,259	988	1,227	754
April 10	837	908	1,162	522
April 18	967	953	801	1,418
April 25	1,194	1,054	1,032	1,225
May 2	985	824	1,224	1,171
May 9	810	731	1,505	1,103
May 16	876	569	1,677	1,084
May 23	960	485	1,378	1,671
May 29	715	831	1,039	714
June 6	799	461	1,316	832
June 13	868	410	1,017	729
June 20	845	448	923	849
June 27	743	454	917	1,085
July 3	846	559	702	1,328
July 11	1,865	627	1,192	1,559
July 18	2,582	945	1,603	2,434
July 25	3,174	1,365	2,443	4,020
Aug. 1	3,373	1,663	3,482	4,705
Aug. 8	3,560	2,489	3,447	6,874
Aug. 15	3,251	3,564	3,963	6,435
Aug. 22	3,624	3,498	5,296	4,724
Aug. 29	3,048	2,904	4,525	3,861
Sept. 5	2,491	1,755	3,148	2,637
Sept. 12	2,687	2,351	3,161	2,207
Sept. 19	2,268	1,688	2,451	1,645
Sept. 26	2,332	1,120	2,260	2,051
Oct. 3	1,907	964	1,668	2,223
Oct. 10	2,077	801	1,213	2,017
Oct. 17	1,346	1,132	1,164	1,941
Oct. 24	1,059	869	1,741	1,016
Oct. 31	1,161	949	1,425	1,010
Nov. 7	1,310	924	1,283	1,356
Nov. 14	1,811	688	1,350	932
Nov. 21	1,750	916	1,236	629
Nov. 28	1,987	1,187	1,220	880
Dec. 5	1,360	1,202	1,416	1,031
Dec. 12	1,692	1,433	1,264	1,648
Dec. 19	1,742	1,294	1,012	1,592
Dec. 26	2,374	1,202	657	947

Corn Receipts at Primary Markets

Aggregate weekly receipts of corn at 14 United States primary markets, as reported by the Chicago Daily Trade Bulletin, in bushels (000's omitted):

Week ending—	1941	1940	1939	1938
Jan. 3	1,595	2,664	3,500	9,177
Jan. 10	3,687	2,829	3,101	12,530
Jan. 17	5,559	2,462	3,456	7,013
Jan. 24	3,013	2,784	3,373	3,000
Jan. 31	3,733	3,744	2,828	4,694
Feb. 7	3,434	2,884	2,424	2,994
Feb. 14	3,078	2,933	2,106	4,675
Feb. 20	2,515	2,950	2,656	5,367
Feb. 28	5,055	3,731	3,435	6,138
March 7	4,068	2,384	2,854	3,975
March 14	3,120	2,814	2,269	3,481
March 21	4,053	2,212	2,979	5,201
March 28	5,770	3,342	3,232	8,680
April 4	4,651	2,643	2,651	7,478
April 10	3,781	2,051	3,107	4,082
April 18	4,603	2,815	2,506	7,538
April 25	3,783	3,248	3,759	7,956
May 2	4,720	2,799	4,376	8,894
May 9	4,839	3,282	4,015	6,972
May 16	5,596	3,316	4,021	5,937
May 23	6,168	2,424	8,046	7,972
May 29	5,883	2,672	5,751	6,277
June 6	6,841	4,960	4,852	5,766
June 13	3,947	4,178	3,717	6,375
June 20	3,135	7,566	3,283	7,200
June 27	4,662	6,262	3,184	6,867
July 3	3,951	5,126	2,331	4,598
July 11	4,504	3,537	2,735	6,469
July 18	5,558	5,854	3,973	6,907
July 25	5,876	5,763	2,901	6,310
Aug. 1	4,340	4,369	1,760	4,741
Aug. 8	3,964	3,628	2,903	3,889
Aug. 15	5,145	2,870	2,346	3,328
Aug. 22	4,505	4,643	2,259	3,471
Aug. 29	3,715	5,905	2,610	3,979
Sept. 5	4,210	5,391	1,660	2,864
Sept. 12	6,341	6,300	4,657	2,301
Sept. 19	7,119	8,059	9,018	4,427
Sept. 26	8,111	7,599	6,450	6,791
Oct. 3	5,145	9,079	6,989	7,527
Oct. 10	5,634	7,024	6,398	8,020
Oct. 17	5,516	9,079	8,661	9,832
Oct. 24	5,174	8,461	7,313	16,175
Oct. 31	5,144	8,218	6,745	14,529
Nov. 7	4,757	5,706	6,162	5,077
Nov. 14	5,054	4,656	6,772	7,689
Nov. 21	6,453	4,532	5,914	5,370
Nov. 28	7,233	3,975	5,067	4,908
Dec. 5	7,097	5,738	4,947	4,113
Dec. 12	8,221	6,890	5,258	5,500
Dec. 19	5,981	4,582	5,884	5,404
Dec. 26	5,022	2,968	4,145	2,782

Wheat Receipts at U. S. Primary Markets

Aggregate weekly receipts of wheat at 14 United States primary markets, as reported by the Daily Trade Bulletin, in bushels (000's omitted):

Week ending—	1941	1940	1939	1938
Jan. 3	1,829	1,774	2,145	2,132
Jan. 10	2,063	2,231	3,090	2,693
Jan. 17	2,632	2,328	2,763	2,971
Jan. 24	2,471	1,948	2,871	2,466
Jan. 31	2,361	2,219	3,093	1,838
Feb. 7	2,274	1,929	2,416	1,874
Feb. 14	2,107	2,001	1,989	3,036
Feb. 20	1,908	2,929	2,196	1,664
Feb. 28	2,040	5,181	2,820	2,615
March 7	2,406	5,444	3,083	2,233
March 14	2,572	4,483	2,891	2,108
March 21	3,248	4,065	3,380	2,159
March 28	3,370	6,201	3,017	2,495
April 4	3,690	5,754	3,197	2,245
April 10	3,653	5,330	4,022	1,544
April 18	4,130	6,551	3,817	3,066
April 25	4,071	8,049	4,461	3,188
May 2	4,056	8,263	4,758	3,768
May 9	4,253	8,475	5,411	3,183
May 16	6,151	6,676	6,362	3,343
May 23	9,096	5,652	6,291	3,058
May 29	8,331	3,702	5,407	2,166
June 6	8,756	3,086	6,123	1,979
June 13	6,920	2,239	6,599	2,830
June 20	10,761	2,487	13,313	4,718
June 27	16,277	5,005	18,332	9,920
July 3	19,697	20,936	26,084	25,154
July 11	31,947	31,096	32,976	31,626
July 18	25,397	26,854	23,610	22,991
July 25	20,696	19,787	11,819	18,717
Aug. 1	16,510	10,403	8,773	13,873
Aug. 8	11,497	6,956	7,500	12,551
Aug. 15	10,663	9,127	7,702	12,865
Aug. 22	11,043	11,357	12,384	14,899
Aug. 29	11,554	13,582	12,276	13,784
Sept. 5	9,256	10,115	10,329	9,620
Sept. 12	9,549	11,446	9,965	9,023
Sept. 19	8,283	9,682	7,954	7,115
Sept. 26	10,202	7,779	6,655	6,992
Oct. 3	7,906	5,265	6,182	7,731
Oct. 10	8,168	3,733	4,247	6,200
Oct. 17	7,012	4,113	3,744	6,223
Oct. 24	6,547	3,799	4,533	5,184
Oct. 31	5,400	3,628	3,280	5,051
Nov. 7	4,245	2,478	2,495	3,616
Nov. 14	4,385	1,751	3,406	5,394
Nov. 21	4,407	2,170	2,664	4,108
Nov. 28	4,570	2,437	2,157	3,566
Dec. 5	5,024	2,346	2,679	3,874
Dec. 12	5,536	2,391	2,887	3,837
Dec. 19	5,198	1,929	2,813	3,519
Dec. 26	5,060	1,693	2,412	1,879

BALTIMORE RECEIPTS AND EXPORTS

Receipts (by rail and water) and exports of grain and grain products at Baltimore, Md., by calendar years (000's omitted):

RECEIPTS

	Bushels					Flour, Millfeed,	
	Wheat	Corn	Oats	Rye	Barley	bbls	tons
1941	20,526	6,535	954	953	369	980	49
1940	12,282	8,234	797	1,494	214	655	39
1939	12,083	5,590	995	1,053	838	823	52
1938	2,554	3,741	882	974	64	890	50
1937	3,129	2,980	603	1,099	133	683	48
1936	2,109	1,835	531	2,497	124	696	47
1935	4,067	1,975	523	2,014	99	575	42
1934	3,369	1,217	889	1,597	65	614	38
1933	2,117	830	393	387	32	663	35
1932	2,928	729	396	...	59	684	31
1931	11,770	878	877	233	424	880	30
1930	11,382	1,034	644	80	45	1,002	20
1929	16,394	1,962	797	55	4,153	987	13
1928	16,856	2,796	1,429	545	9,994	1,050	15

EXPORTS

	Bushels					Flour, Millfeed,	
	Wheat	Corn	Oats	Rye	Barley	bbls	tons
1941	14,819	4,507	36	398	180	...	...
1940	14,521	5,718	52	339	601	...	...
1939	3,137	3,083	...	121	348	46	...
1938	847	2,224	...	...	10	59	...
1937	254	140	...	...	105	28	...
1936	772	...	...	...	...	16	...
1935	296	200	...	...	...	19	...
1934	280	...	30	...	...	11	...
1933	255	...	...	...	...	22	...
1932	6,800	...	6	...	31	45	...
1931	9,149	...	228	49	408	136	...
1930	6,953	...	4	...	8	202	...
1929	10,716	1,656	170	...	4,813	202	...
1928	10,858	1,522	424	525	9,581	149	...

CINCINNATI GRAIN MOVEMENT

Receipts and shipments of grain at Cincinnati, Ohio, by calendar years, in bushels (000's omitted):

	RECEIPTS					SHIPMENTS				
	Wheat	Corn	Oats	Rye	Barley		Wheat	Corn	Oats	Rye	Barley
1941	5,499	2,011	910	126	123	1941	5,089	988	590	3	44
1940	5,278	2,235	996	202	107	1940	5,073	1,009	476	119	4
1939	6,045	2,420	1,308	133	46	1939	4,772	1,063	1,036	95	4
1938	4,013	2,421	1,482	153	21	1938	3,984	2,295	1,260	113	..
1937	4,195	3,096	1,384	170	91	1937	3,320	1,981	616	85	..
1936	4,257	5,460	1,440	347	75	1936	3,524	3,414	568	162	1
1935	4,635	2,328	1,066	204	36	1935	4,572	1,356	678	57	3
1934	3,419	2,629	1,652	162	32	1934	3,411	1,260	1,250	114	4
1933	4,621	2,681	1,764	127	58	1933	4,544	1,747	1,506	76	3
1932	4,922	2,253	2,132	112	13	1932	5,038	1,975	1,938	66	2
1931	5,116	3,324	2,562	137	107	1931	5,251	2,368	2,418	89	40
1930	3,281	5,290	3,238	285	197	1930	3,345	4,086	2,884	254	48
1929	4,483	5,931	2,360	175	143	1929	3,603	5,606	2,058	125	66
1928	1,977	5,194	3,550	169	200	1928	2,288	4,427	2,410	129	54
1927	4,759	4,951	3,706	140	32	1927	3,171	3,851	2,502	71	4
1926	5,190	6,671	3,858	139	39	1926	4,101	5,471	2,272	74	..

FIRST ARRIVALS OF NEW GRAIN IN CHICAGO

Dates of the first arrivals of new grain at Chicago:

Year—	Winter wheat	Spring wheat	Corn	Oats	Rye	Barley
1941	June 26	July 16	Sept. 15	July 10	July 12	July 22
1940	July 5	Aug. 3	Oct. 1	July 15	July 29	July 3
1939	June 28	July 11	Sept. 20	July 11	July 12	July 22
1938	June 18	July 28	Sept. 22	July 16	June 29	July 14
1937	June 28	July 24	Sept. 17	July 12	July 14	July 21
1936	June 23	July 25	Sept. 26	July 10	July 6	July 17
1935	July 3	Aug. 28	Oct. 8	July 22	July 18	July 29
1934	June 25	July 5	Oct. 5	July 13	July 2	July 3
1933	July 5	July 24	Oct. 2	July 14	July 10	July 14
1932	July 5	July 15	Oct. 1	July 11	July 13	July 14
1931	June 20	July 18	Oct. 1	July 11	July 18	July 14
1930	July 2	July 22	Sept. 22	July 14	July 17	July 18
1929	July 8	July 20	Oct. 7	July 24	July 20	July 23
1928	June 28	July 31	Oct. 1	July 20	July 21	July 17
1927	June 28	July 29	Oct. 24	July 23	July 21	July 21

Indianapolis Grain Movement

Receipts and shipments of grain by rail at Indianapolis, Ind., by calendar years, in bushels (000's omitted):

RECEIPTS

	Wheat	Corn	Oats	Rye
1941	5,497	24,862	6,218	322
1940	5,621	17,663	4,666	746
1939	5,386	21,754	5,106	646
1938	4,019	18,775	8,212	513
1937	4,301	12,275	7,404	703
1936	4,049	23,706	5,506	1,239
1935	4,828	15,186	3,772	1,034
1934	5,066	17,025	5,692	1,298
1933	4,235	21,783	11,810	80
1932	4,385	14,767	13,436	31
1931	5,263	20,665	10,994	28
1930	5,390	24,777	10,978	135
1929	5,653	23,301	11,990	98
1928	4,600	26,114	12,638	64
1926	5,405	16,736	8,558	92
1925	4,528	18,838	9,016	66
1924	5,055	18,582	11,802	272
1923	6,131	17,975	12,080	383
1922	3,301	21,274	9,893	703
1921	4,223	18,961	14,928	513
1920	4,389	20,687	17,174	403

SHIPMENTS

	Wheat	Corn	Oats	Rye
1941	2,700	17,987	6,414	387
1940	1,730	13,259	4,336	600
1939	2,183	16,319	5,654	457
1938	2,346	15,817	7,962	451
1937	2,073	7,684	7,162	627
1936	2,565	16,623	4,642	1,140
1935	2,501	10,105	3,450	945
1934	2,381	11,175	5,272	1,242
1933	2,746	17,040	11,466	42
1932	3,501	11,419	13,138	20
1931	3,004	17,095	11,040	30
1930	4,573	18,861	10,242	119
1929	3,520	19,705	11,374	65
1928	2,365	20,303	10,760	44
1926	2,627	12,082	7,956	55
1925	2,141	14,527	7,818	133
1924	2,689	14,027	10,035	159
1923	3,927	12,524	10,670	331
1922	1,538	13,558	7,659	365
1921	2,675	12,621	13,014	477
1920	3,332	15,451	16,302	394

Wichita Wheat Movement

Receipts and shipments of wheat at Wichita, by calendar years, in bushels:

Year—	Receipts	Shipments
1941	26,509,200	12,931,500
1940	22,039,500	13,029,000
1939	27,832,500	17,301,000
1938	22,659,000	14,125,500
1937	27,957,000	15,034,500
1936	18,294,000	11,101,500
1935	15,807,000	8,413,500
1934	17,979,000	15,076,500
1933	13,203,000	7,057,500
1932	24,351,000	14,163,000
1931	34,293,000	27,688,500
1930	24,513,000	19,036,500
1929	33,762,000	27,249,000
1928	31,417,200	23,950,350

KANSAS CITY GRAIN MOVEMENT BY MONTHS

Receipts and shipments of wheat, corn and oats at Kansas City, in bushels, by months, for three years:

	RECEIPTS			SHIPMENTS		
1941—	Wheat	Corn	Oats	Wheat	Corn	Oats
January	1,848,000	766,700	106,000	3,752,870	381,000	42,000
February	2,830,400	707,200	118,000	2,363,150	129,000	66,000
March	2,835,200	1,021,700	102,000	2,655,805	186,000	44,000
April	4,062,400	748,000	210,000	2,651,110	538,500	116,000
May	10,581,600	448,800	142,000	5,540,135	414,000	74,000
June	16,924,800	425,000	80,000	11,602,910	1,233,000	8,000
July	26,443,200	153,000	450,000	7,433,750	1,995,000	188,000
August	6,246,400	506,600	444,000	2,291,160	666,000	268,000
September	4,161,600	1,162,800	352,000	1,626,035	424,500	266,000
October	2,452,800	926,500	196,000	1,511,790	432,000	188,000
November	2,520,000	1,190,000	308,000	2,411,665	310,500	122,000
December	3,774,400	2,640,100	284,000	2,350,630	559,500	132,000
Totals	84,780,800	10,696,400	2,792,000	47,191,010	7,269,000	1,514,000
1940—	Wheat	Corn	Oats	Wheat	Corn	Oats
January	1,392,000	1,063,500	84,000	2,095,535	768,000	80,000
February	2,168,000	556,500	110,000	1,693,330	669,000	52,000
March	3,504,000	766,500	102,000	1,569,695	544,500	36,000
April	5,384,000	1,036,500	46,000	1,408,500	624,000	26,000
May	3,158,400	831,000	62,000	1,654,205	774,000	28,000
June	3,515,200	726,000	44,000	1,463,275	517,500	20,000
July	41,288,000	841,500	52,000	10,318,045	369,000	18,000
August	3,120,000	706,500	82,000	3,546,290	163,500	30,000
September	1,294,400	2,611,200	160,000	2,986,020	46,500	54,000
October	2,128,000	4,603,600	178,000	3,793,560	60,000	82,000
November	1,388,800	1,290,300	130,000	1,461,710	57,000	84,000
December	1,577,600	1,737,400	166,000	1,984,420	130,500	58,000
Totals	69,918,400	16,770,500	1,716,000	33,974,585	4,723,500	574,000
1939—	Wheat	Corn	Oats	Wheat	Corn	Oats
January	3,169,600	1,002,000	218,000	4,934,445	300,000	498,000
February	2,483,200	591,000	150,000	3,392,920	322,500	132,000
March	3,916,800	522,000	228,000	3,915,630	523,500	252,000
April	3,897,600	888,000	206,000	4,092,475	750,000	244,000
May	5,408,000	1,083,000	244,000	3,248,940	963,000	208,000
June	15,252,800	705,000	66,000	2,241,080	714,000	58,000
July	33,867,200	439,500	246,000	9,159,945	472,500	108,000
August	3,092,800	384,000	184,000	4,499,375	454,500	60,000
September	2,646,400	1,209,000	170,000	4,940,705	520,500	136,000
October	2,464,000	1,087,500	158,000	2,669,890	361,500	100,000
November	2,268,800	1,713,000	120,000	1,917,125	339,000	84,000
December	2,081,600	1,605,000	128,000	2,126,835	445,500	132,000
Totals	80,548,800	11,229,000	2,118,000	47,139,365	6,166,500	2,012,000

Kansas City Grain Movement

Receipts and shipments of grain at Kansas City, by calendar years, in bushels (000's omitted):

	RECEIPTS				
	Wheat	Corn	Oats	Rye	Barley
1941..	84,781	10,696	2,792	381	3,074
1940..	69,918	16,771	1,216	113	338
1939..	80,549	11,229	2,118	417	394
1938..	99,621	12,311	3,068	607	339
1937..	96,083	12,243	3,396	476	565
1936..	63,744	17,481	3,243	213	998
1935..	49,701	13,054	3,806	321	747
1934..	44,058	25,236	1,998	177	314
1933..	49,115	18,831	2,658	310	502
1932..	80,294	7,631	1,604	134	598
1931.	125,032	22,044	3,110	133	1,057
1930..	95,968	30,022	5,594	468	2,864
1929.	101,552	32,417	5,156	204	2,677
1928..	97,519	42,185	4,400	228	2,995
1927..	89,378	24,765	4,194	442	1,264
1926..	87,500	17,181	4,221	568	265
1925..	52,046	18,255	13,506	225	511
1924..	90,824	23,113	7,693	323	683
1923..	68,735	17,575	13,984	337	1,623
1922..	35,449	16,100	7,799	357	961
1921.	110,204	15,495	7,118	442	1,657
1920.	70,738	10,813	7,553	893	2,461
1919..	72,137	15,801	12,503	612	3,140
1918..	50,448	30,302	15,548	465	1,566
1917..	36,954	14,017	14,917	442	711
1916..	77,785	22,186	7,961	414	2,043

Receipts of kafir corn, milo maize and feterita in the years since records were kept, in bushels:

1941.....	2,662,800	1930.....	2,480,500
1940.....	1,090,600	1929.....	5,173,300
1939.....	931,000	1928.....	4,588,300
1938.....	1,002,400	1927.....	4,050,200
1937.....	800,800	1926.....	3,315,400
1936.....	1,255,800	1925.....	4,282,300
1935.....	635,600	1924.....	4,637,600
1934.....	978,600	1923.....	1,772,100
1933.....	1,325,000	1922.....	3,124,000
1932.....	1,392,000	1921.....	4,712,500
1931.....	1,465,200		

	SHIPMENTS				
	Wheat	Corn	Oats	Rye	Barley
1941..	47,191	7,269	1,514	276	2,069
1940..	33,975	4,724	574	47	66
1939..	47,139	9,167	2,012	86	186
1938..	51,190	7,280	2,144	195	78
1937..	53,121	3,734	2,914	114	165
1936..	32,352	9,192	3,294	72	378
1935..	26,556	15,945	1,692	119	322
1934..	31,344	19,149	1,442	186	326
1933..	26,931	8,226	1,004	107	333
1932..	38,532	1,293	588	111	374
1931..	84,359	16,815	1,584	166	1,131
1930..	62,919	22,087	3,980	373	1,982
1929..	64,727	23,365	2,882	156	1,715
1928..	56,524	36,438	2,516	282	2,454
1927..	55,431	13,161	2,856	498	820
1926..	43,148	9,714	5,445	403	146
1925..	34,985	14,122	5,483	105	230
1924..	61,051	12,584	4,345	376	802
1923..	35,621	8,233	6,858	183	593
1922..	65,201	8,876	4,317	250	350
1921..	76,235	10,919	4,260	352	1,041
1920..	51,979	4,968	4,357	771	1,378
1919..	48,285	9,312	9,402	339	1,149
1918..	21,915	24,221	10,210	391	787
1917..	31,044	9,210	13,018	344	583
1916..	64,885	22,201	3,534	368	2,015

Shipments of kafir corn, milo maize and feterita in the years since records were kept, in bushels:

1941.....	1,532,400	1928.....	3,987,000
1940.....	864,000	1927.....	3,125,500
1939.....	825,600	1926.....	2,428,000
1938.....	936,000	1925.....	2,939,000
1937.....	554,400	1924.....	3,076,600
1936.....	652,800	1923.....	1,484,000
1935.....	471,600	1922.....	2,407,000
1934.....	998,400	1921.....	3,219,000
1933.....	1,157,800	1920.....	2,724,000
1932.....	1,496,600	1919.....	1,369,000
1931.....	1,261,000	1918.....	1,649,400
1930.....	1,960,000	1917.....	665,000
1929.....	4,116,000		

Kansas City Feed Movement

Receipts and shipments of bran and shorts at Kansas City by years, in tons:

	Receipts	Shipments
1941.....	109,025	303,375
1940.....	69,400	260,925
1939.....	68,725	301,150
**1938.....	75,425**	**333,275**
1937.....	79,900	319,500
1936.....	74,000	277,375
1935.....	41,975	265,906
1934.....	38,700	256,875
1933.....	26,960	218,560
1932.....	29,280	209,800
1931.....	32,420	236,420
1930.....	56,400	225,500
1929.....	93,480	225,200
1928.....	65,960	311,580
1927.....	59,060	163,160
1926.....	65,920	231,700
1925.....	47,380	312,020
1924.....	57,480	272,120

MANUFACTURED FEED (TONS)

	Shipments
1941.....	250,700
1940.....	219,200
1939.....	204,875
**1938.....	153,350**
1937.....	204,200
1936.....	274,050
1935.....	155,875
1934.....	197,075
1933.....	122,000
1932.....	121,000
1931.....	197,700
1930.....	389,880
1929.....	472,000

Philadelphia Grain and Flour Movement

Receipts and shipments of grain and flour at Philadelphia, by rail, by calendar years (000's omitted):

	RECEIPTS				
	Wheat	Flour	Bus		
	bus	bbls	Corn	Oats	Rye
1941...	6,939	1,777	4,301	177	111
1940...	10,903	1,708	2,876	279	56
1939...	6,321	1,694	3,077	629	31
1938...	2,519	1,524	2,216	541	22
1937...	3,372	1,498	6,255	441	67
1936...	1,395	1,555	3,567	525	841
1935...	2,402	1,357	3,347	656	1,794
1934...	2,272	1,260	1,692	1,081	939
1933...	1,492	1,363	603	673	102
1932...	3,242	1,766	435	662	30
1931...	6,930	1,869	190	647	38
1930...	3,048	2,080	340	641	49
1929...	8,284	1,894	1,353	1,323	21
1928...	11,133	1,974	2,102	1,390	424
1927...	20,609	2,194	722	1,302	436
1926...	19,287	2,213	1,051	2,802	443
1925...	33,194	2,521	1,391	7,290	1,473
1924...	31,383	2,612	2,605	2,500	1,850
1923...	34,858	3,318	6,343	3,750	726
1922...	49,347	3,153	14,913	4,383	2,237

	SHIPMENTS				
	Wheat	Flour	Bus		
	bus	bbls	Corn	Oats	Rye
1941...	5,279	13	2,796	...	...
1940...	11,276	10	3,218	70	...
1939...	2,680	1	1,376	420	...
1938...	938	9	1,127	...	...
1937...	1,166	6	725	...	23
1936...	852	2	...	...	...
1935...	241	1	...	...	...
1934...	1,170	2	...	...	...
1933...	541	1	13	...	...
1932...	4,262	8	...	...	...
1931...	4,171	13	...	10	20
1930...	5,331	68	...	...	22
1929...	6,333	75	1,304	315	...
1928..	10,340	112	1,041	375	413
1927..	17,373	237	58	54	411
1926..	19,363	298	723	1,787	469
1925..	32,660	389	712	5,565	1,474
1924..	25,764	391	1,711	893	1,430
1923..	31,190	640	4,373	716	648
1922..	33,960	580	12,460	1,213	2,326

United States Wheat Grades and Types

Percentage of total federal wheat receipt inspections graded respectively No. 1, No. 2, No. 3 and other grades, by crop years ended June 30:

	1941	1940	1939	1938	1937	1936
No. 1	46	35	31	32	45	26
No. 2	31	36	33	27	31	32
No. 3	14	21	20	17	11	18
All others	9	8	16	24	13	24
	100	100	100	100	100	100

Percentage of total federal wheat inspections falling into the principal type classifications, by crop years ended June 30:

	1941	1940	1939	1938	1937	1936
Hard red spring	20	22	16	11	9	21
Durum	5	5	4	3	2	4
Hard red winter	51	47	55	54	53	41
Soft red winter	12	13	11	16	14	17
White	9	8	9	10	7	11
Mixed wheat	4	5	5	6	7	6
	100	100	100	100	100	100

United States Wheat Receipts by Grade

Total amounts of wheat of each class and grade, in terms of carloads, inspected on arrival at all inspection points by inspectors licensed under the United States Grain Standards Act, as reported by the Grain and Seed Division, Agricultural Marketing Service, U. S. Department of Agriculture, by crop years:

	1938-39	1939-40	1940-41
Dark nor. spring—			
No. 1 heavy	8,586	15,259	23,849
No. 1	22,001	23,300	30,470
No. 2	13,555	15,548	12,625
No. 3	19,417	23,710	10,720
All others	18,675	10,430	5,469
Totals	82,234	88,247	83,133
Northern spring—			
No. 1 heavy	1,501	1,148	628
No. 1	558	213	605
No. 2	429	231	397
No. 3	178	81	211
All others	159	64	634
Totals	2,825	1,737	2,475
Red spring—			
No. 1 heavy	19	15	..
No. 1	25	14	2
No. 2	31	8	3
No. 3	42	10	3
All others	17	3	1
Totals	134	50	9
Total hard red spring	**85,193**	**90,034**	**85,617**
Hard amber durum—			
No. 1	10,850	5,275	3,375
No. 2	4,228	7,188	6,241
No. 3	1,130	1,280	2,639
All others	285	253	2,119
Totals	16,493	13,996	13,774
Amber durum—			
No. 1	769	392	253
No. 2	212	399	772
No. 3	62	70	223
All others	30	15	271
Totals	1,073	876	1,519
Durum—			
No. 1	69	119	71
No. 2	27	104	179
No. 3	13	28	54
All others	14	8	65
Totals	123	259	369
Red durum—			
No. 1	2,624	2,542	1,964
No. 2	1,486	1,734	1,754
No. 3	504	239	349
All others	427	65	242
Totals	5,041	4,580	4,309
Total durum	**22,730**	**19,711**	**19,971**
Dark hard winter—			
No. 1	48,352	40,472	58,076
No. 2	49,457	33,768	31,644
No. 3	19,274	18,137	17,658
All others	9,926	4,714	14,042
Totals	127,009	97,091	121,420
Hard winter—			
No. 1	32,478	24,029	49,998
No. 2	46,699	38,317	27,911
No. 3	41,112	19,953	11,391
All others	33,932	6,201	8,314
Totals	154,221	88,500	97,614
Yellow hard winter—			
No. 1	5,238	820	418
No. 2	5,820	4,467	573
No. 3	819	1,442	156
All others	568	222	117
Totals	12,445	6,951	1,264
Total hard red winter	**293,675**	**192,542**	**220,298**
Red winter—			
No. 1	5,544	1,294	10,561
No. 2	21,843	23,866	26,044
No. 3	12,877	17,193	8,923
All others	13,548	6,436	3,558
Totals	53,812	48,789	49,086
Western red—			
No. 1	2,489	2,294	1,427
No. 2	600	395	737
No. 3	32	21	104
All others	7	6	31
Totals	3,128	2,716	2,299
Total soft red winter	**56,940**	**51,505**	**51,385**
Hard white—			
No. 1	10,388	9,578	3,241
No. 2	8,678	4,535	5,842
No. 3	1,901	530	4,278
All others	749	189	1,208
Totals	21,716	14,832	14,569
Soft white—			
No. 1	5,910	7,925	6,240
No. 2	8,383	5,206	8,666
No. 3	2,058	503	3,354
All others	451	124	692
Totals	16,802	13,758	18,952
White club—			
No. 1	4,290	3,284	899
No. 2	3,251	1,922	3,187
No. 3	283	305	871
All others	31	32	115
Totals	7,855	5,543	5,072
Western white—			
No. 1	438	617	268
No. 2	442	304	630
No. 3	64	27	96
All others	35	12	11
Totals	979	960	1,005
Total white wheat	**47,352**	**35,093**	**39,598**
Mixed wheat—			
No. 1	5,513	3,973	5,217
No. 2	9,075	9,399	6,618
No. 3	7,634	4,085	2,559
All others	4,417	1,207	1,565
Totals	26,639	18,664	15,959
Mixed durum—			
No. 1	239	497	765
No. 2	209	648	747
No. 3	70	201	307
All others	37	52	204
Totals	555	1,398	2,023
Grand totals	**533,084**	**408,947**	**434,851**

Omaha Grain Movement

Receipts and shipments of grain at Omaha, Neb., by calendar years, in bushels (000's omitted):

	RECEIPTS				
	Wheat	Corn	Oats	Rye	Barley
1941..	22,336	12,891	2,682	843	2,495
1940..	14,983	19,297	1,885	533	260
1939..	21,567	11,075	4,156	700	658
1938..	23,698	15,352	4,367	1,132	830
1937..	22,618	14,061	7,760	931	1,221
1936..	20,815	16,141	6,244	627	1,622
1935..	16,489	7,620	7,688	491	2,261
1934..	15,427	17,417	1,884	202	200
1933..	14,674	16,902	3,370	659	414
1932..	17,594	5,961	2,228	225	133
1931..	40,408	13,145	3,099	132	269
1930..	44,664	24,369	7,048	784	1,339
1929..	43,186	18,761	8,290	1,904	1,779
1928..	39,420	27,146	7,746	1,453	2,051

	SHIPMENTS				
	Wheat	Corn	Oats	Rye	Barley
1941..	9,703	17,363	2,113	610	2,211
1940..	7,026	9,770	1,881	469	274
1939..	9,441	12,573	4,027	668	877
1938..	14,306	12,775	4,973	1,070	691
1937..	13,650	7,450	8,910	914	869
1936..	12,557	13,663	8,939	758	2,302
1935..	9,348	10,440	3,636	374	1,145
1934..	9,292	16,657	3,195	328	154
1933..	15,821	9,384	1,798	497	253
1932..	13,348	3,742	1,572	157	102
1931..	25,442	14,778	2,542	108	344
1930..	31,766	24,822	8,020	883	1,582
1929..	32,831	17,879	8,910	2,205	1,730
1928..	23,556	31,101	8,826	1,672	2,094

Receipts and shipments of grain in Omaha during 1941, by months, in bushels (000's omitted):

	RECEIPTS				
	Wheat	Corn	Oats	Rye	Barley
January	404	881	42	3	5
February	254	633	56	2	5
March	611	969	94	..	22
April	861	590	54	2	13
May	2,425	632	64	18	4
June	3,148	413	30	49	35
July	8,135	336	403	101	357
August	3,512	893	618	209	260
September	1,133	2,309	369	228	583
October	721	1,836	320	62	307
November	417	1,249	254	69	578
December	715	2,150	378	100	326
	22,336	12,891	2,682	843	2,495

	SHIPMENTS				
	Wheat	Corn	Oats	Rye	Barley
January	458	566	41	27	7
February	639	479	39	29	6
March	602	757	79	85	10
April	720	1,515	55	18	15
May	973	838	38	25	8
June	2,036	786	35	39	18
July	1,743	2,887	215	76	246
August	853	1,681	385	51	282
September	626	1,817	254	73	482
October	515	1,768	388	84	290
November	206	2,406	166	59	448
December	332	1,763	418	44	399
	9,703	17,263	2,113	610	2,211

Memphis Grain Movement

Receipts of grain and alfalfa meal at Memphis by years, in bushels (000's omitted):

	Wheat	Corn	Oats	Alfalfa meal, tons
1941.....	909	1,372	846	31
1940.....	284	1,690	1,023	..
1939.....	516	1,941	1,184	33
1938.....	612	2,529	1,224	28
1937.....	259	1,980	1,666	37
1936.....	153	1,998	2,224	28
1935.....	126	1,217	1,161	21
1934.....	228	1,808	1,390	29
1933.....	90	1,621	2,209	3
1932.....	136	1,144	942	1
1931.....	310	1,945	4,255	4
1930.....	337	2,991	5,002	8
1929.....	287	4,204	5,728	12
1928.....	291	4,604	5,212	17
1927.....	333	4,933	5,025	15
1926.....	434	6,513	7,861	17
1925.....	402	6,261	8,866	22
1924.....	381	8,032	10,131	27
1923.....	436	6,982	9,651	29
1922.....	390	6,645	8,857	24
1921.....	384	5,330	7,693	17

St. Louis Grain Receipts

Receipts of grain at St. Louis, by rail, water and trucks, by years, in bushels (000's omitted):

	Wheat	Corn	Oats	Rye	Barley
1941*.	15,035	13,491	2,784	149	2,155
1940*.	19,501	14,840	3,466	44	1,801
1939*.	26,753	17,189	3,010	28	1,859
1938*.	21,153	30,851	4,483	85	1,855
1937*.	22,396	22,579	6,513	137	2,171
1936*.	14,916	20,082	7,256	176	2,329
1935*.	12,007	10,346	4,909	181	1,426
1934*.	15,778	11,463	3,488	249	914
1933*.	15,810	16,932	5,772	326	1,189
1932*.	14,257	16,326	4,488	38	1,423
1931*.	25,300	14,652	9,873	76	1,439
1930*.	32,505	20,718	12,639	169	1,351
1929*.	28,795	23,716	16,407	71	1,453
1928*.	34,585	27,350	15,585	114	1,862
1927*.	22,850	18,312	16,018	261	900
1926*.	26,156	24,077	16,792	213	1,019
1925*.	24,668	23,722	22,632	152	1,264
1924..	42,150	36,414	32,962	474	1,160
1923..	36,578	32,400	36,223	851	1,224

*Receipts since 1925 have been figured on a basis to include only grain locally consigned.

Duluth-Superior Lake Shipments

Lake shipments of grain from Duluth-Superior, by calendar years, in bushels (000's omitted):

DOMESTIC GRAIN

	Wheat	Corn	Oats	Rye	B'l'y	F'xs'd
1941..	46,853	20,305	1,433	3,756	4,710	2,657
1940..	46,282	13,531	4,257	3,127	5,057	5,148
1939..	40,035	13,565	15,552	4,448	6,703	4,192
1938..	**41,010**	**9,242**	**11,527**	**4,670**	**5,708**	**1,481**
1937..	**25,996**	**3,573**	**8,522**	**5,355**	**9,149**	**970**
1936..	**9,532**	**2,326**	**6,598**	**3,080**	**4,582**	**992**
1935..	**14,823**	**1,028**	**8,513**	**2,767**	**7,381**	**2,420**
1934..	**25,342**	**7,144**	**9,498**	**1,189**	**4,057**	**237**
1933..	**42,269**	**5,865**	**4,258**	**3,153**	**4,553**	**1,901**
1932..	**39,981**	**24**	**821**	**2,070**	**2,637**	**3,949**
1931..	**41,789**	**2,314**	**2,920**	**1,078**	**1,971**	**3,593**
1930..	**63,293**	**1,757**	**7,101**	**1,871**	**6,312**	**6,478**
1929..	**66,722**	**2,063**	**3,309**	**4,938**	**14,803**	**3,621**
1928..	**92,778**	**487**	**2,922**	**12,618**	**29,137**	**5,919**
1927..	**94,274**	**...**	**7,644**	**31,378**	**22,615**	**8,051**
1926..	**42,827**	**...**	**9,881**	**8,493**	**4,855**	**4,080**
1925..	**66,166**	**652**	**25,135**	**12,196**	**14,922**	**7,334**
1924..	**86,914**	**8,105**	**11,030**	**41,702**	**11,660**	**13,519**
1923..	**38,264**	**1,480**	**2,017**	**17,063**	**3,575**	**4,806**

BONDED GRAIN*

	Wheat	Oats	Barley	Fl'xs'd	Rye
1941.....	15,967	...	...	...	...
1940.....	2,343	...	...	...	...
1937..... 1,194	...	...	...	...	**75**
1936.....	505	...	...	...	...
1935.....	506	...	102	...	...
1934.....	197	...	32	...	...
1933.....	235	...	...	...	...
1932.....	318	...	36	...	...
1931.....	133	...	179	...	...
1930.....	634	...	155	...	25
1929.....	480	...	163	...	...
1928.....	839	...	528	...	...
1927.....	787	24	419	...	53
1926.....	1,257	215	771	36	143
1925.....	1,589	328	1,000	28	157
1924.....	1,319	127	641	...	298
1923.....	1,045	223	383	...	190

*1939, none; 1938, none.

Duluth Wheat Movement by Type

Receipts and shipments of domestic wheat at Duluth, according to varieties, by calendar years, in bushels (000's omitted):

RECEIPTS

	Spring	Winter	Durum	Totals*
1941.....	49,928	5,126	10,790	65,844
1940.....	42,552	8,732	4,022	55,306
1939.....	35,730	9,536	3,808	49,074
1938.....	42,718	4,142	5,705	52,565
1937.....	23,826	3,554	3,553	30,933
1936.....	7,754	2,319	1,799	11,892
1935.....	14,730	3,548	1,790	20,768
1934.....	17,750	4,922	1,965	24,637
1933.....	38,537	5,923	1,442	45,902
1932.....	33,367	6,108	1,371	40,846
1931.....	22,712	17,776	4,060	44,548
1930.....	36,097	33,901	2,760	72,758
1929.....	33,553	11,125	34,165	78,843
1928.....	44,901	6,345	59,634	110,880
1927.....	54,489	11,564	44,597	110,651
1926.....	21,469	4,559	24,520	50,548
1925.....	41,448	261	32,166	73,875
1924.....	58,739	3,532	36,694	98,965
1923.....	13,065	652	34,356	48,073

SHIPMENTS

	Spring	Winter	Durum	Totals*
1941.....	40,428	5,076	4,494	49,998
1940.....	37,306	7,645	4,243	49,194
1939.....	32,207	6,929	3,940	43,076
1938.....	36,161	3,879	4,786	39,826
1937.....	23,669	3,501	4,232	31,402
1936.....	14,846	2,095	8,544	25,485
1935.....	14,476	3,220	2,569	20,265
1934.....	24,217	6,293	1,720	32,230
1933.....	35,161	6,719	3,118	44,998
1932.....	32,845	10,012	1,152	44,009
1931.....	25,510	18,043	2,538	46,091
1930.....	32,385	30,682	5,228	68,295
1929.....	32,093	7,985	32,876	72,954
1928.....	40,072	6,671	50,593	97,336
1927.....	47,888	12,207	39,566	99,662
1926.....	19,645	2,652	25,311	47,608
1925.....	43,949	214	27,894	72,057
1924.....	54,013	3,015	34,821	91,849
1923.....	10,290	497	30,675	41,462

*White wheat received in 1937, 40,300 bus; 1936, 20,000; shipped in 1937, 69,000; 1936, 35,000.

Duluth Receipts by Lake

Receipts of grain at Duluth, Minn., by lake, in thousand bushels:

	1938	1939	1940	1941
Canadian spring wheat	..	..	..	..
Canadian feed wheat	..	..	..	..
Canadian durum	..	..	..	25
U. S. winter wheat	..	..	..	..
Oats	..	53	..	..
Corn (Argentine)	..	..	..	..
Barley (Canadian)	..	120	468	157
Rye	..	..	..	..
Flaxseed (Argentine)	69	..	..	..

DULUTH-SUPERIOR LAKE SHIPMENTS

Shipments of domestic and bonded grain and flaxseed from Duluth-Superior by lake in 1940, in bushels (000's omitted):

	Domestic wheat				Bonded	Coarse grain				
	Spring	Durum	Winter	Totals	wheat	Corn	Oats	Rye	Barley	Flaxs'd
Buffalo	32,330	3,256	4,855	40,441	1,097	18,683	1,433	2,776	4,498	1,622
Detroit	377	...	...	377	...	...	...	...	154	...
Toledo	749	...	...	749	...	...	...	...	...	...
Cleveland	514	...	116	630	...	...	...	...	...	1,035
Oswego	3,293	336	3	3,632	...	1,210	...	...	58	...
Chicago	326	...	...	326	...	...	...	980	...	...
Totals	37,589	3,592	4,974	46,155	1,097	19,893	1,433	3,756	4,710	2,657
Canadian ports—										
Montreal	...	...	...	...	...	413	...	...	...	...
Humberstone	587	...	...	587	396	...	...	...	...	...
Goderich	110	...	...	110	515	...	...	...	...	...
Port McNicoll	...	...	...	...	2,084	...	...	...	...	...
Tiffen	...	...	...	...	605	...	...	...	...	...
Port Colborne	...	...	...	...	610	...	...	...	...	...
Owen Sound	...	...	...	...	122	...	...	...	...	...
Midland	...	...	...	...	2,696	...	...	...	...	...
Sarnia	...	...	...	...	3,357	...	...	...	...	...
Prescott	...	...	...	...	1,324	...	...	...	...	...
Three Rivers	...	...	...	...	2,455	...	...	...	...	...
Collingwood	...	...	...	...	206	...	...	...	...	...
Totals	697	...	...	697	14,870	413	...	...	...	...
Grand totals	38,286	3,592	4,974	46,852	15,967	20,306	1,433	3,756	4,710	2,657
Totals, 1940	36,887	5,258	4,137	46,282	2,343	13,531	4,257	3,127	5,057	5,148
1939	30,792	5,608	3,634	40,034	...	13,564	15,552	4,448	6,704	4,192
1938	34,918	3,955	3,473	42,346	...	18,123	15,558	5,924	12,580	1,481
1937	21,077	1,418	3,500	25,995	1,194	3,572	8,522	5,355	9,150	970
1936	8,014	342	1,176	9,532	505	2,325	6,239	3,080	4,460	992
1935	12,376	724	2,228	15,328	...	1,028	8,514	2,767	7,483	2,420
1934	23,387	258	1,697	25,342	197	7,144	9,497	1,189	4,090	237
1933	34,865	4,683	2,966	42,504	427	5,865	4,258	3,153	4,553	1,902
1932	31,981	6,946	1,053	39,981	318	24	821	2,070	2,637	3,949
1931	24,897	14,430	2,461	41,788	133	2,314	2,920	1,078	1,971	3,593
1930	31,220	27,761	4,312	63,293	634	1,757	7,101	1,871	6,312	6,478
1929	30,029	28,966	7,728	66,722	380	2,063	3,309	4,938	14,803	3,621
1928	38,744	47,503	6,526	92,778	839	487	2,923	12,619	29,136	5,919
1927	45,893	36,906	11,474	94,274	787	...	7,643	31,378	22,616	8,052

DULUTH-SUPERIOR GRAIN MOVEMENT

Receipts and shipments of grain at Duluth-Superior, by calendar years, in bushels (000's omitted):

RECEIPTS

	Wheat		Oats		Barley		Rye		Flaxseed		Corn
	Total	Bonded	Total	Bonded	Total	Bonded	Total	Bonded	Total	Bonded	Total
1941..	65,844	4,213	2,476	...	7,883	157	5,255	...	4,213	...	21,716
1940..	55,306	11,900	3,760	...	6,467	468	2,933	...	5,345	...	12,688
1939..	49,074	2,739	12,855	51	9,180	200	4,798	...	4,570	...	14,345
1938..	52,565	...	16,660	...	14,585	131	7,124	...	1,611	69	27,610
1937..	30,934	220	9,362	...	11,429	1,393	6,478	...	958	1,239	*7,006
1936..	11,892	16,044	3,375	55	6,467	4,938	2,907	100	1,443	...	2,478
1935..	20,068	3,128	15,336	54	8,690	632	3,144	...	2,583	...	465
1934..	23,637	4,852	2,088	77	5,727	1,505	931	53	495	...	4,274
1933..	45,902	475	12,691	...	5,927	...	4,815	...	1,698	...	10,532
1932..	40,846	320	1,941	...	3,144	36	1,844	...	4,445	1	239
1931..	44,548	113	1,986	...	1,827	135	774	...	3,993	...	1,393
1930..	72,758	567	8,258	...	6,142	208	3,983	...	7,547	62	2,890
1929..	78,842	322	5,445	5	45,083	175	7,634	2	4,558	37	1,963
1928..	110,880	853	3,040	12	30,239	598	13,483	17	6,264	6	1,140
1927..	110,651	879	773	14	22,691	437	27,771	48	10,508	91	133
1926..	50,548	1,236	9,637	161	5,083	800	9,787	125	7,492	136	124
1925..	73,875	1,538	23,561	376	15,601	1,123	11,967	193	10,059	57	686
1924..	98,965	1,653	20,556	195	12,066	685	41,276	300	15,636	195	7,875

SHIPMENTS

	Wheat		Oats		Barley		Rye		Flaxseed		Corn
	Total	Bonded	Total	Bonded	Total	Bonded	Total	Bonded	Total	Bonded	Total
1941..	49,998	16,012	1,525	...	7,242	279	5,255	...	4,213	...	20,416
1940..	49,194	2,354	4,690	...	7,272	...	3,764	...	5,282	...	13,460
1939..	43,077	...	16,149	...	9,373	...	4,633	...	4,630	...	14,039
1938..	44,826	...	15,630	...	14,978	201	6,446	...	1,595	...	27,801
1937..	31,402	1,194	9,829	...	15,904	60	5,894	75	2,321	...	6,466
1936..	25,485	1,169	7,318	...	8,382	134	3,463	...	1,402	...	2,506
1935..	20,265	552	10,688	...	9,404	194	3,774	...	2,571	...	...
1934..	32,230	349	10,190	...	6,877	145	1,908	4	603	...	7,602
1933..	44,998	436	4,267	...	4,751	...	3,246	...	2,013	...	5,974
1932..	44,009	819	1,292	...	2,777	39	2,097	...	4,138	...	140
1931..	46,091	171	2,428	4	2,100	182	3,089	...	4,345	1	2,973
1930..	68,296	698	6,850	13	6,487	250	2,406	25	7,312	...	1,796
1929..	72,954	398	3,603	...	14,819	163	6,556	...	4,419	...	2,124
1928..	97,336	871	2,987	...	29,690	528	12,893	2	7,032	22	499
1927..	99,662	845	7,953	37	23,061	53	31,580	53	10,078	22	18
1926..	47,608	1,280	10,388	234	5,171	870	9,008	146	5,880	75	...
1925..	72,057	1,589	25,248	353	15,192	1,012	11,155	157	8,810	113	701
1924..	91,849	1,409	11,171	127	11,986	689	43,112	302	14,600	2	8,171

*2,846,000 bus of bonded corn received.

CHICAGO GRAIN AND FLOUR MOVEMENT

Receipts and shipments of grain and grain products at Chicago, Ill., by calendar years (000's omitted):

RECEIPTS

	Flour, bbls	Bushels						Tons	
		Wheat	Corn	Oats	Rye	Barley	Flaxseed	Mill-feed	Oil cake
1941.....	10,084	22,050	100,166	20,859	5,535	13,833	1,818	172	8
1940.....	10,895	28,164	93,127	18,544	3,009	12,041	1,052	151	1
1939.....	11,575	26,710	83,985	21,946	2,009	12,130	366	158	1
1938.....	10,969	30,096	135,801	24,544	3,307	10,800	796	141	1
1937.....	10,325	38,106	66,727	24,445	5,285	10,819	978	105	13
1936.....	10,612	23,482	60,503	21,987	7,255	15,691	862	120	1
1935.....	9,365	21,701	32,970	17,664	5,396	8,240	1,534	96	1
1934.....	8,956	23,780	55,500	14,413	8,688	10,503	970	116	2
1933.....	8,849	13,501	92,879	21,163	6,712	8,771	1,398	151	3
1932.....	8,790	13,898	70,892	28,246	842	4,130	804	156	4
1931.....	10,405	60,173	57,405	17,782	1,913	4,078	1,464	178	5
1930.....	11,396	27,759	73,678	29,210	3,578	7,163	1,023	185	2
1929.....	12,083	34,237	81,581	37,605	8,591	8,553	1,357	185	21
1928.....	12,351	37,152	117,775	53,760	4,841	16,459	2,360	183	16
1927.....	12,287	42,710	86,021	49,066	3,793	10,688	2,898	151	17
1926.....	12,907	38,113	92,710	47,243	2,163	9,022	2,274	153	7
1925.....	13,009	28,244	83,557	53,547	5,895	9,833	2,152	174	7
1924.....	12,253	69,012	99,524	82,831	9,672	11,461	1,985	159	3

SHIPMENTS

	Flour, bbls	Bushels						Tons	
		Wheat	Corn	Oats	Rye	Barley	Flaxseed	Mill-feed*	Oil cake
1941.....	5,637	13,442	66,979	16,021	2,729	3,873	457	609	6
1940.....	6,926	20,087	66,224	16,233	2,504	2,620	726	530	5
1939.....	7,284	23,395	54,199	20,763	1,877	2,707	390	491	3
1938.....	7,051	25,170	98,580	22,669	1,967	2,956	150	485	1
1937.....	6,589	32,009	30,025	27,064	6,514	3,012	812	422	35
1936.....	7,426	20,762	25,333	17,915	6,544	3,310	335	388	1
1935.....	6,598	14,520	14,878	11,561	8,261	2,273	400	320	1
1934.....	6,033	18,011	39,327	13,389	4,961	2,379	89	344	1
1933.....	5,448	16,282	51,742	17,577	1,978	1,616	31	328	2
1932.....	5,192	17,225	47,607	24,754	1,242	918	9	428	9
1931.....	6,765	53,795	28,700	19,898	3,227	3,011	45	412	85
1930.....	7,372	29,649	37,428	24,077	5,513	2,350	10	594	546
1929.....	7,533	23,446	46,144	31,378	699	3,769	32	601	5
1928.....	7,081	19,660	53,898	34,004	1,407	6,921	18	504	16
1927.....	7,776	29,365	40,032	26,323	1,894	2,778	19	587	14
1926.....	8,671	32,131	39,232	36,678	2,292	2,453	43	491	5
1925.....	8,492	25,885	41,239	48,919	6,052	2,730	45	502	11
1924.....	8,079	63,435	45,921	46,012	7,121	4,652	32	543	39

*Thousands not omitted in millfeed shipments.

Chicago Grain and Flour Movement

Receipts and shipments of flour and grain at Chicago by routes during 1941 (000's omitted):

RECEIPTS

	Flour, bbls	Bushels			Soybeans
		Wheat	Corn	Oats	
Ill. waterways	....	1,695	15,349	211	442
Lake	....	1,404	...	...	...
N. Western	1,307	1,306	16,233	3,072	855
Ill. Central	434	2,848	12,513	2,829	1,563
R. Island	312	1,078	11,335	3,025	823
Burlington	1,233	2,198	9,809	2,892	1,240
Chi. & Alt.	714	1,384	3,571	1,207	626
Chi. & E.I.	437	849	2,555	813	1,147
C., M., St. P. & P.	2,178	1,866	10,867	1,776	770
Wabash	353	2,022	2,908	1,072	645
Gt. West.	689	792	3,858	734	403
Santa Fe	2,121	439	1,688	439	262
Soo Line	8	388	163	155	2
E. J. & E.	..	32	433	283	219
E. & S. E. Line	298	3,209	5,784	1,543	2,986
Motor trucks	...	540	3,100	808	539
Totals, 1941	10,084	22,050	100,166	20,859	12,322
Totals—					
1940	10,895	28,164	93,127	18,544	9,910
1939	11,575	26,710	83,985	21,946	..
1938	10,969	30,069	155,801	24,544	..
1937	10,325	38,106	66,727	24,445	..
1936	10,612	20,169	58,457	21,954	..
1935	9,365	21,701	32,970	17,664	..
1934	8,956	23,780	55,500	14,413	..
1933	8,849	13,501	92,879	21,163	..
1932	8,790	13,898	70,892	28,246	..
1931	10,405	60,173	57,425	17,782	..
1930	11,396	27,759	73,678	29,210	..
1929	12,083	34,237	81,581	37,605	..
1928	12,351	37,152	117,775	53,760	..
1927	12,287	42,710	86,021	49,066	..

SHIPMENTS

	Flour, bbls	Bushels			Soybeans
		Wheat	Corn	Oats	
Ill. waterways	....	688	...	...	...
By lake	140	1,709	23,403	350	152
N. West.	527	516	441	60	46
Ill. Central	212	553	3,454	1,974	432
R. Island	3	39	7	28	..
Burlington	5	124	3	31	2
C. & Alton	38	5	105	78	72
C. & E. Ill.	127	12	68	24	1
C., M. & St. P. & P.	62	264	1,894	549	524
Wabash	195	672	1,833	493	872
Gt. West.	2	..	..	10	1
Santa Fe	11	44	12	96	..
Soo Line	1	..	..	2	..
E. & S. E. Lines	4,314	8,816	35,759	12,326	1,679
Totals, 1941	5,637	13,442	66,979	16,021	3,781
Totals—					
1940	6,926	20,287	66,224	16,233	4,325
1939	7,248	23,395	54,199	20,763	..
1938	7,051	25,170	98,580	22,669	..
1937	6,589	32,009	30,025	27,064	..
1936	5,911	11,566	15,784	17,091	..
1935	6,598	14,520	14,875	11,561	..
1934	6,033	18,011	39,327	13,389	..
1933	5,448	16,282	51,742	17,577	..
1932	5,192	17,225	47,607	24,754	..
1931	5,061	10,293	12,981	13,045	..
1930	7,372	29,649	37,428	24,077	..
1929	6,040	13,129	30,345	22,644	..
1928	7,081	19,660	53,989	34,004	..
1927	7,776	29,336	40,032	26,323	..

Chicago Lake Shipments

Shipments of wheat, flour, corn and oats by lake, for two years (000's omitted):

FLOUR AND WHEAT

	1940		1941	
	Flour	Wheat	Flour	Wheat
Buffalo	1,065	6,817	13	1,709
Erie	352	...	...	...
Depot Harbor	210	...	127	...
Totals	1,627	6,817	140	1,709

CORN AND OATS (BUS)

	1940		1941	
	Corn	Oats	Corn	Oats
Buffalo	15,368	...	9,540	80
Collingwood	942	...	1,841	...
Ogdensburg	...	...	556	...
Midland	707	40	...	...
Tiffin	4,239	63	3,004	172
Cardinal	110	...	216	...
Owen Sound	1,566	...	1,524	98
Philadelphia	84	...	...	...
Prescott	...	...	464	...
Oswego	607	...	956	...
New York	32	...	124	...
Goderich	2,250	...	386	...
Montreal	423	...	182	...
Pt. Colborne	3,398	...	210	...
Albany	...	...	5	...
Pt. McNicoll	263	...	238	...
Three Rivers	630	...	...	...
Sarnia	2,289	...	3,322	...
Toronto	5,837	...	835	...
Walkerville	76	...	...	...
Totals	38,895	103	23,403	350

Great Lakes—Opening of Lake Navigation

Date of opening of navigation on the Great Lakes, as indicated by first arrival of vessels at Duluth from the lower lake ports:

1941	April 8	1928	May 4
1940	April 22	1927	April 16
1939	May 1	1926	May 2
1938	April 16	1925	April 17
1937	April 15	1924	April 28
1936	May 2	1923	May 5
1935	April 19	1922	April 21
1934	May 3	1921	April 14
1933	April 24	1920	April 29
1932	April 24	1919	April 14
1931	April 19	1918	May 1
1930	April 29	1917	May 6
1929	April 15	1916	April 23

MILWAUKEE GRAIN AND FLOUR MOVEMENT

Receipts and shipments of grain and grain products by rail and water at Milwaukee (000's omitted):

RECEIPTS

	Wheat, bus	Flour, bbls	Corn, bus	Oats, bus	Rye, bus	Barley, bus	Millfeed, tons	Flaxseed, bus
1941	4,033	936	10,546	703	2,014	31,102	1	696
1940	2,070	840	10,801	447	1,045	23,512	2	305
1939	4,100	361	7,240	664	994	22,776	6	196
1938	5,197	900	13,100	1,025	566	24,842	3	...
1937	6,674	761	3,530	1,600	1,202	16,595	5	...
1936	3,684	821	7,037	906	573	28,842	11	157
1935	4,879	734	5,405	2,104	177	17,886	10	...
1934	4,328	774	8,449	2,057	306	17,999	11	1
1933	2,142	668	17,655	6,300	492	13,116	14	4
1932	2,875	965	7,421	2,150	143	7,460	5	2
1931	22,875	1,005	6,406	3,102	133	9,792	3	34
1930	4,334	972	12,405	8,654	448	12,343	2	672
1929	7,100	2,265	13,750	13,205	695	12,238	44	439
1928	5,007	2,643	17,361	7,966	1,124	14,188	51	950
1927	6,459	2,733	11,766	13,607	1,070	9,851	48	1,107

SHIPMENTS

	Wheat, bus	Flour, bbls	Corn, bus	Oats, bus	Rye, bus	Barley, bus	Millfeed, tons	Flaxseed, bus
1941	1,788	362	7,296	589	949	11,436	139	...
1940	1,788	281	3,711	610	920	7,908	142	...
1939	4,379	150	2,910	834	210	6,883	85	...
1938	7,048	48	9,685	1,030	565	7,977	62	...
1937	4,708	260	1,007	1,073	809	7,490	49	...
1936	4,660	12	1,308	1,413	468	8,120	113	...
1935	3,944	11	3,140	1,643	63	6,191	92	...
1934	3,467	202	5,547	3,825	236	4,678	96	...
1933	6,374	97	11,572	3,267	554	3,336	61	4
1932	3,087	375	3,471	1,849	105	1,821	64	4
1931	18,313	426	5,323	6,260	151	2,359	87	7
1930	2,517	400	7,663	8,452	3,067	268	105	20
1929	6,875	1,655	10,506	9,811	1,143	6,145	121	29
1928	4,220	2,071	11,639	8,518	590	5,318	103	15
1927	6,548	2,197	8,140	11,825	1,421	2,876	203	...

NEW YORK CITY RECEIPTS AND EXPORTS

Receipts and exports of grain and grain products at New York City, by calendar years (000's omitted):

RECEIPTS

	Wheat, bus	Flour, *bbls	Bushels: Corn	Oats	Rye	Barley	Flaxseed	Tons: Millfeed ‡	Oil cake	Bbls: Oatmeal	Cornmeal
1941	26,744	8,080	8,313	1,886	362	1,960	2,613	3,150	..	..	30
1940	13,430	8,230	2,330	962	746	184	1,268	171	..	..	55
1939	21,296	8,273	3,325	1,278	613	3,368	2,678	389	..	..	33
1938	8,042	7,782	7,076	604	637	1,288	3,432	371	..	2	33
1937	12,202	7,269	9,802	1,043	1,837	2,005	6,076	2	..	4	25
1936	25,535	7,928	3,591	1,320	174	152	4,565	1	..	22	73
1935	19,934	6,222	4,794	3,115	695	396	6,683	2	..	17	140
1934	21,252	6,326	2,816	3,704	580	96	1,831	1	..	26	268
1933	23,404	6,269	3,244	2,404	84	159	3,927	2	..	18	210
1932	33,211	7,127	3,071	2,405	1,073	42	2,760	4	2	9	158
1931	58,555	10,344	1,096	1,445	273	3,452	4,220	3	155	19	184
1930	55,023	14,798	2,088	1,767	266	176	1,811	155	500	50	133
1929	49,591	15,919	15,695	4,949	606	11,437	1,318	15	925	40	15
1928	67,717	14,462	2,964	8,576	3,660	18,289	1,681	14	363	32	21
1927	72,052	11,780	2,425	7,183	5,517	23,320	6,353	20	240	60	18

EXPORTS

	Wheat, bus	Flour, bbls	Bushels: Corn	†Oats	†Rye	†Barley	Flaxseed	Tons: Millfeed ‡	Oil cake	Bbls: Oatmeal	Cornmeal
1941	23,644	¶..	5,466	1,122	254	2,107	...	...	...	...	...
1940	15,766	2,005	542	23	894	681	...	...	20	...	...
1939	15,131	2,385	1,211	...	421	3,006	...	67	174	...	2
1938	10,509	2,288	6,641	6	833	1,447	...	394	191	...	...
1937	18,557	2,427	1,674	...	1,515	1,788	...	443	267	...	...
1936	20,733	2,580	...	190	130	48	...	164	178	...	...
1935	18,279	2,383	...	729	273	128	...	39	192	...	...
1934	26,908	2,364	55	5	...	...	...	72	155	...	...
1933	20,104	2,107	279	25	355	...	...	...	176	...	...
1932	40,366	905	799	105	530	95	1	960	93	8	1
1931	54,264	3,685	...	309	446	3,420	62	124	177	25	3
1930	53,888	6,051	...	109	152	818	128	...	122	5	3
1929	46,605	3,902	509	1,034	419	11,508	...	30	233	17	7
1928	61,582	4,383	1,210	3,794	4,113	17,199	...	14	387	73	14
1927	67,275	4,139	667	2,196	7,004	20,544	...	32	401	150	27

*Via rail and barge canal only. Do not include coastal receipts. †Include re-exports of foreign imported grain. ‡No 000's omitted. ¶Wheat flour exports not available because of regulations imposed by war.

BUFFALO RECEIPTS BY LAKE

Receipts of flour and grain at Buffalo, N. Y., by lake, by calendar years (000's omitted):

Year—	Flour, bbls	Bushels: Wheat	Corn	Oats	Barley	Rye	Flaxseed
1941	....	89,509	28,322	4,562	5,694	5,170	2,068
1940*	....	82,027	22,012	10,819	4,870	3,120	4,225
1939*	....	103,805	26,697	11,945	12,140	4,751	3,140
1938	....	69,904	22,375	6,648	5,025	2,071	614
1937	....	54,950	15,484	4,038	5,988	3,065	726
1936	....	77,396	11,957	3,302	6,748	1,227	715
1935	....	87,438	4,522	6,483	6,687	1,998	979
1934	....	86,590	21,669	5,008	4,198	390	371
1933	....	87,972	28,464	5,349	4,970	2,194	688
1932	....	98,869	24,501	8,366	2,886	3,338	3,245
1931	....	127,765	11,367	6,073	7,171	1,640	2,538
1930	....	148,155	10,152	6,880	6,681	1,688	5,999
1929	....	138,189	9,996	5,538	15,154	1,328	1,835
1928	....	210,591	10,036	9,951	35,688	7,724	5,654
1927	....	188,451	11,648	10,778	28,991	11,439	6,403

*Also received: 1939—screenings, 1,150,745 tons; soybeans, 4,336,792 bus. 1940—Soybeans, 47,689 bus; screenings, 1,096,134 bus.

1941—RECEIPTS AND SHIPMENTS BY ERIE CANAL

Receipts and shipments of flour and grain by the Erie Canal for 1941 are as follows:

Forwarded from—	Flour, tons	Bushels: Wheat	Corn	Oats	Rye	Barley
Albany	.....	284,067	.....	.....	.....	.....
Buffalo	27,437	7,000,400	4,763,571	250,688	395,593	123,000
Buffalo via Oswego	.....	219,100	111,036	.....	108,571	.....
Edgewater, N. J.	.....	.....	55,000	.....	.....	.....
Jersey City, N. J.	.....	.....	48,000	.....	.....	.....
New York, N. Y.	.....	50,167	55,000	.....	.....	.....
Oswego	.....	4,196,200	2,413,679	.....	490,750	58,375
Chicago via Oswego	.....	.....	173,786	.....	.....	.....
Port Colborne, Ont., via Oswego	.....	106,400	.....	.....	.....	.....
Totals	27,437	11,856,334	7,620,072	250,688	995,214	181,375
Received at—						
Albany	.....	4,161,267	4,623,750	.....	640,179	116,375
Buffalo	.....	284,067	.....	.....	.....	.....
New York	.....	7,233,733	2,612,679	250,688	246,464	20,000
Oswego	.....	75,000	71,572	.....	.....	45,000
Canada via Oswego	.....	.....	158,000	.....	.....	.....
Chicago via Oswego	.....	50,167	.....	.....	.....	.....
Peekskill	.....	.....	62,214	.....	.....	.....
Philadelphia, Pa.	.....	52,100	.....	.....	108,571	.....
Port Jefferson	.....	.....	92,857	.....	.....	.....
Totals	.....	11,856,334	7,620,072	250,688	995,214	181,375

FOR OVER FIFTY YEARS!

"Gold Mine" FLOUR

H. H. KING FLOUR MILLS CO.

MINNEAPOLIS, MINNESOTA

Movement of Grain by Lake at Milwaukee in 1941

Receipts and shipments by lake at Milwaukee for the year 1941, in bushels:

RECEIPTS

From—	Barley	Rye	Total
Port Arthur	1,362,688	271,893	1,634,581

SHIPMENTS

To—	Wheat	Corn	Total
Buffalo	1,016,500	1,465,900	2,482,400
Oswego	.....	242,000	242,000
Cardinal	.....	330,000	330,000
Port Colborne	.....	756,350	756,350
Prescott	.....	266,550	266,550
Totals	1,016,500	3,060,800	4,077,300

1940

RECEIPTS

From—	Wheat	Barley	Rye	Total
Superior	702,381	359,703	...	1,062,084
Buffalo	...	123,710	...	123,710
Pt. Arthur	...	...	261,204	261,204
Totals	702,381	483,413	261,204	1,446,998

SHIPMENTS

To—	Wheat	Corn	Total
Buffalo	312,490	1,059,797	1,372,287
Canadian ports	...	850,400	850,400
Totals	312,490	1,910,197	2,222,687

Seattle Grain Receipts

Receipts of grain by rail at Seattle, Wash., in cars, by calendar years:

	Wheat	Oats	Barley	Corn	Rye
1941	8,582	436	240	461	73
1940	7,255	456	244	722	26
1939	8,516	533	185	667	7
1938	8,556	622	160	498	85
1937	8,485	100	195	9	161
1936	6,063	26	763	139	29
1935	6,482	338	118	18	23
1934	9,162	1,190	159	476	49
1933	8,857	425	204	432	30
1932	6,793	302	162	378	34
1931	11,271	363	343	771	28
1930	8,657	317	147	1,138	31
	Flour	Hay		Flour	Hay
1941	1,830	435	1940	1,821	92

Canadian Grain Receipts at Buffalo

Receipts of Canadian grain at Buffalo, N. Y., by calendar years, in bushels (000's omitted):

	Wheat	Oats	Barley	Flaxs'd	Rye
1941	45,754	3,129	2,256	380	1,061
1940	34,437	7,437	288	55	1,476
1939	56,337	3,489	6,144	283	...
1938	14,899	...	890	365	20
1937	12,635	...	565	696	...
1936	56,040	73	2,559	...	790
1935	64,816	819	272	...	310
1934	49,713	397	802	...	...
1933	36,016	...	500	...	327
1932	44,447	33	129	293	870
1931	65,773	889	4,406	330	1,077
1930	88,832	646	1,716	938	...

Buffalo Shipments by Erie Canal

Shipments from Buffalo, N. Y., via the Erie Canal, by calendar years (000's omitted):

	Flour, tons	Bushels: Wheat	Oats	Barley	Rye	Corn
1941	27	7,000	250	123	395	4,763
1940	56	16,201	354	63	821	5,236
1939	53	2,234	1,225	86	43	2,533
1938	43	3,466	803	36	46	..
1937	37	3,684	1,004	668	1,268	..
1936	70	15,526	1,424	397	395	..
1935	51	17,681	1,549	370	236	..
1934	47	19,879	1,075	..	..	..
1933	69	17,638	1,395	236	109	..
1932	30	27,476	4,622	..	2,379	..
1931	39	41,018	..	..	..	..
1930	3	38,097	40	..	105	..
1929	..	19,785	116	6,803	333	..
1928	2	31,564	..	5,828	1,007	..
1927	..	17,440	775	7,359	1,140	..
1926	60	15,830	901	8,083	1,925	..
1925	..	18,902	2,411	9,464	8,652	..
1924	4	13,761	1,238	2,651	6,204	..
1923	..	9,731	389	1,438	8,652	..

Tacoma Grain Receipts

Receipts of grain by rail at Tacoma, Wash., in cars, by calendar years:

	Wheat	Corn	Oats	Rye	Barley
1941	9,081	551	227	4	358
1940	9,042	647	194	1	265
1939	10,287	498	211	2	290
1938	9,016	450	240	10	225
1937	6,193	144	260	13	84
1936	7,559	36	194	122	46
1935	9,368	40	191	4	113
1934	8,875	294	84	3	139
1933	7,580	299	126	4	142
1932	6,239	291	92	3	116
1931	8,124	537	180	10	200
1930	8,192	590	102	13	145
1929	8,082	442	175	752	11
1928	7,845	665	176	8	210
1927	7,310	620	95	9	204
1926	6,377	337	162	675	9
1925	4,917	371	278	42	184
1924	5,921	415	280	17	378
1923	8,469	492	254	38	139
	Flour	Hay		Flour	Hay
1941	862	212	1940	728	211

Western Canada Wheat Inspection

Inspections of wheat at Winnipeg and other points in western Canada, in bushels, by crop years ended Aug. 31 for years up to 1924-25; since that date crop years ended July 31:

1940-41	294,190,690	1929-30	221,663,280
1939-40	373,710,121	1928-29	466,480,153
1938-39	278,956,568	1927-28	398,664,675
1937-38	119,138,676	1926-27	336,231,814
1936-37	183,673,022	1925-26	353,760,220
1935-36	218,140,000	1924-25*	214,389,710
1934-35	227,362,000	1923-24	291,268,150
1933-34	229,193,694	1922-23	301,136,839
1932-33	325,197,667	1921-22	231,606,000
1931-32	259,656,899	1920-21	187,185,000
1930-31	290,527,680	1919-20	122,588,800

*For 11 months ending July 31, 1925.

ACREAGE AND YIELD OF FOREIGN AGRICULTURAL CROPS

A Section Devoted to Statistics Dealing With the Acreage Planted to and the Yield of Various Agricultural Crops in Countries Which Are Foreign to the United States

Canadian Crops, 1941, by Provinces

Canadian production of the more important grains, by provinces (in bus, 000's omitted):

	Wheat	Oats	Barley
Prince Edward Isl...	245	3,726	288
Nova Scotia	47	3,094	340
New Brunswick	131	6,200	518
Quebec	567	46,872	3,762
Ontario	17,716	76,032	13,202
Manitoba	54,500	51,000	43,000
Saskatchewan	136,000	82,700	28,000
Alberta	88,590	71,000	27,000
British Columbia ...	1,695	5,530	549
	299,401	346,154	116,659

Ontario Wheat Crop

Production of winter and spring wheat in Ontario, by years, in bushels:

	Fall wheat	Spring wheat	Total
1941....	16,465,000	1,251,000	17,716,000
1940....	22,099,000	1,301,000	23,400,000
1939....	22,271,000	1,550,000	23,821,000
1938....	**19,814,000**	**1,610,000**	**21,424,000**
1937....	**18,689,000**	**1,601,000**	**20,290,000**
1936....	**12,478,000**	**1,735,000**	**14,213,000**
1935....	**12,601,000**	**1,857,000**	**14,458,000**
1934....	**6,724,000**	**1,803,000**	**8,527,000**
1933....	**14,030,600**	**1,663,000**	**15,693,600**
1932....	**15,061,600**	**1,990,368**	**17,051,968**
1931....	**15,013,555**	**1,982,594**	**16,996,149**
1930....	**18,047,207**	**2,179,204**	**20,226,411**
1929....	**17,820,739**	**1,929,892**	**19,750,631**
1928....	**16,766,408**	**2,181,855**	**18,948,263**

Canadian Crops

Grain crops for all Canada, as reported by the Dominion Bureau of Statistics, by crop years, in bushels (000's omitted):

	Wheat	Barley	Buckwheat	Corn
1941*..	299,401	116,659	5,569	12,036
1940...	540,190	104,256	6,692	6,956
1939...	520,623	103,147	6,848	8,097
1938...	360,010	102,242	7,079	7,690
1937...	**182,410**	**83,124**	**7,745**	**5,415**
1936...	**229,218**	**71,922**	**8,601**	**6,083**
1935...	**281,935**	**83,975**	**7,948**	**7,765**
1934...	**276,849**	**63,742**	**8,635**	**6,798**
1933...	**281,892**	**63,359**	**8,483**	**5,054**
1932...	**443,061**	**80,773**	**8,424**	**5,057**
1931...	**321,325**	**67,383**	**6,917**	**5,449**
1930...	**420,672**	**135,160**	**10,903**	**5,826**
1929...	**304,520**	**102,313**	**10,470**	**5,183**
1928...	**566,726**	**136,391**	**10,899**	**5,241**
1927...	**479,665**	**96,938**	**10,890**	**4,262**
1926...	**407,137**	**99,987**	**9,882**	**7,813**
1925...	**395,474**	**87,118**	**10,546**	**10,564**

	Flaxseed	Oats	Rye	Peas
1941*...	6,412	346,154	12,956	1,587
1940....	3,049	380,526	13,994	1,355
1939....	2,044	384,407	15,307	1,307
1938....	1,259	371,382	10,988	1,365
1937....	**697**	**268,442**	**5,771**	**1,199**
1936....	**1,795**	**271,778**	**4,281**	**1,229**
1935....	**1,666**	**394,348**	**9,606**	**1,616**
1934....	**910**	**321,120**	**4,706**	**1,588**
1933....	**632**	**307,478**	**4,177**	**1,377**
1932....	**2,719**	**391,561**	**8,470**	**1,518**
1931....	**2,465**	**328,278**	**5,322**	**1,370**
1930....	**5,069**	**423,148**	**22,018**	**2,371**
1929....	**2,060**	**282,838**	**13,160**	**1,979**
1928....	**3,614**	**452,153**	**14,648**	**2,588**
1927....	**4,885**	**439,713**	**14,950**	**2,795**
1926....	**5,995**	**383,416**	**12,178**	**2,685**
1925....	**6,237**	**402,296**	**9,158**	**3,411**

ACRES (000'S OMITTED)

	Wheat	Barley	Buckwheat	Corn
1941*...	22,362	5,549	276	300
1940....	28,726	4,342	326	186
1939....	26,756	4,347	335	183
1938....	25,930	4,453	376	180
1937....	**25,570**	**4,331**	**395**	**166**
1936....	**25,289**	**4,432**	**398**	**164**
1935....	**24,115**	**3,886**	**380**	**167**
1934....	**23,935**	**3,612**	**407**	**161**
1933....	**25,991**	**3,658**	**398**	**136**
1932....	**27,182**	**3,758**	**368**	**130**
1931....	**26,355**	**3,791**	**335**	**131**
1930....	**24,898**	**5,559**	**490**	**161**
1929....	**25,255**	**5,925**	**516**	**152**
1928....	**24,119**	**4,881**	**503**	**139**
1927....	**22,460**	**3,506**	**471**	**132**
1926....	**22,896**	**3,647**	**457**	**210**
1925....	**20,790**	**3,524**	**474**	**239**

	Flaxseed	Oats	Rye	Peas
1941*....	958	13,841	1,078	97
1940.....	397	12,298	1,035	82
1939.....	307	12,789	1,102	76
1938.....	210	13,010	741	80
1937.....	**241**	**13,043**	**894**	**84**
1936.....	**468**	**13,118**	**635**	**92**
1935.....	**214**	**14,096**	**719**	**94**
1934.....	**227**	**13,781**	**684**	**95**
1933.....	**243**	**13,529**	**683**	**85**
1932.....	**441**	**13,148**	**774**	**85**
1931.....	**648**	**12,837**	**778**	**81**
1930.....	**582**	**13,259**	**1,448**	**129**
1929.....	**382**	**12,479**	**992**	**125**
1928.....	**378**	**13,137**	**840**	**154**
1927.....	**476**	**13,240**	**743**	**151**
1926.....	**738**	**12,741**	**753**	**145**
1925.....	**843**	**12,556**	**643**	**183**

*Preliminary.

Wheat Acreage—China and Manchuria

Wheat area harvested in China and Manchuria as officially estimated by the United States Department of Agriculture, in thousand acres:

	China	Manchuria
1940.....	.....	2,518
1939.....	.....	3,190
1938.....	.....	2,681
1937.....	**42,617**	**2,967**
1936.....	**50,333**	**2,682**
1935.....	**51,420**	**2,420**
1934.....	**48,250**	**2,040**
1933.....	**48,220**	**3,400**
1932.....	**51,170**	**3,450**
1931.....	**48,710**	**3,920**

Crops of Western Canada

Government estimates of the four leading crops in each of the provinces of Manitoba, Saskatchewan and Alberta, by crop years, in bushels (000's omitted):

MANITOBA

Year—	Wheat	Oats	Barley	Flax
1941*.....	54,500	51,000	43,000	1,540
1940.....	66,400	33,000	27,500	800
1939.....	63,000	34,500	28,000	525
1938.....	50,000	41,000	31,000	300
1937.....	**48,000**	**43,075**	**34,800**	**370**
1936.....	**28,000**	**20,400**	**18,990**	**415**
1935.....	**23,250**	**30,700**	**23,100**	**158**
1934.....	37,100	26,752	17,298	180
1933.....	32,500	29,500	16,900	110
1932.....	**44,041**	**36,826**	**20,014**	**240**
1931.....	**28,112**	**25,500**	**15,400**	**350**
1930.....	**43,600**	**50,562**	**49,974**	**1,086**
1929.....	**28,565**	**30,740**	**36,518**	**445**

SASKATCHEWAN

Year—	Wheat	Oats	Barley	Flax
1941*.....	136,000	82,700	28,000	3,600
1940.....	266,700	93,000	23,500	1,650
1939.....	250,000	112,000	26,000	1,200
1938.....	137,800	90,000	20,000	725
1937.....	**37,000**	**22,338**	**5,518**	**123**
1936.....	**117,000**	**65,462**	**16,627**	**1,240**
1935.....	**142,198**	**131,951**	**23,149**	**1,055**
1934.....	114,200	64,288	12,403	180
1933.....	**123,841**	**75,422**	**17,560**	**410**
1932.....	**211,551**	**107,400**	**23,400**	**2,200**
1931.....	**132,466**	**67,700**	**14,340**	**1,820**
1930.....	**206,700**	**125,509**	**40,522**	**3,017**
1929.....	**160,565**	**68,944**	**30,755**	**1,462**

ALBERTA

Year—	Wheat	Oats	Barley	Flax
1941*.....	88,500	71,000	27,000	1,100
1940.....	180,700	103,000	32,000	425
1939.....	150,000	85,000	27,000	350
1938.....	148,200	101,000	29,200	160
1937.....	**74,000**	**77,000**	**22,100**	**124**
1936.....	**67,000**	**50,000**	**17,000**	**75**
1935.....	**98,648**	**82,203**	**16,376**	**155**
1934.....	112,500	81,000	1,927	105
1933.....	**94,500**	**72,500**	**12,783**	**43**
1932.....	**167,355**	**101,500**	**19,700**	**200**
1931.....	**140,603**	**90,500**	**20,800**	**200**
1930.....	**147,000**	**77,940**	**18,999**	**190**
1929.....	**92,534**	**41,936**	**12,514**	**63**

TOTALS, THREE PROVINCES

Year—	Wheat	Oats	Barley	Flax
1941*.....	279,000	204,700	98,000	6,240
1940.....	513,800	229,000	83,000	2,875
1939.....	463,000	231,500	81,000	2,075
1938.....	336,000	232,000	80,200	1,185
1937.....	159,000	142,413	62,418	617
1936.....	**212,000**	**135,862**	**52,617**	**1,730**
1935.....	**264,096**	**244,854**	**62,625**	**1,368**
1934.....	**263,800**	**172,040**	**44,742**	**827**
1933.....	**263,004**	**177,422**	**47,243**	**563**
1932.....	**422,947**	**245,726**	**63,114**	**2,640**
1931.....	**301,181**	**183,700**	**50,540**	**2,370**
1930.....	**397,300**	**254,011**	**109,495**	**4,063**
1929.....	**281,664**	**141,620**	**79,787**	**1,970**

*Preliminary.

Acreage

MANITOBA

	Wheat	Oats	Barley	Flax
1941.....	2,700	1,600	1,650	190
1940.....	3,512	1,293	1,256	90
1939.....	3,201	1,377	1,344	70
1938.....	**3,184***	**1,462**	**1,355**	**43**
1937.....	**2,872**	**1,410**	**1,393**	**38**
1936.....	**2,566**	**1,441**	**1,384**	**88**
1935.....	**2,587**	**1,434**	**1,121**	**17**
1934.....	**2,533**	**1,458**	**1,125**	**26**
1933.....	**2,536**	**1,504**	**1,173**	**20**
1932.....	**2,651**	**1,464**	**1,123**	**49**
1931.....	**2,617**	**1,518**	**1,129**	**101**
1930.....	**2,470**	**1,590**	**1,991**	**112**
1929.....	**2,301**	**1,558**	**2,192**	**62**

SASKATCHEWAN

	Wheat	Oats	Barley	Flax
1941.....	12,198	4,594	1,740	600
1940.....	15,571	3,880	1,251	232
1939.....	14,233	4,144	1,149	187
1938.....	**13,793**	**4,171**	**1,207**	**139**
1937.....	**13,893**	**4,380**	**1,174**	**175**
1936.....	**14,596**	**4,610**	**1,299**	**354**
1935.....	**13,206**	**4,942**	**1,146**	**168**
1934.....	**13,262**	**4,625**	**1,088**	**175**
1933.....	**14,743**	**4,571**	**1,228**	**205**
1932.....	**15,543**	**4,365**	**1,330**	**381**
1931.....	**15,026**	**4,295**	**1,375**	**509**
1930.....	**14,326**	**4,531**	**2,016**	**431**
1929.....	**14,445**	**4,256**	**2,229**	**298**

ALBERTA

	Wheat	Oats	Barley	Flax
1941.....	6,653	3,114	1,492	150
1940.....	8,667	2,645	1,115	42
1939.....	8,379	2,706	1,114	40
1938.....	**7,969**	**2,885**	**1,125**	**31**
1937.....	**7,384**	**2,789**	**995**	**20**
1936.....	**7,360**	**2,454**	**1,036**	**17**
1935.....	**7,500**	**3,102**	**920**	**19**
1934.....	**7,501**	**3,032**	**749**	**18**
1933.....	**7,898**	**2,870**	**631**	**11**
1932.....	**8,201**	**2,705**	**701**	**23**
1931.....	**7,943**	**2,466**	**710**	**31**
1930.....	**7,164**	**2,165**	**748**	**28**
1929.....	**7,551**	**1,918**	**704**	**13**

THREE PROVINCES

	Wheat	Oats	Barley	Flax
1941.....	21,551	9,308	4,882	940
1940.....	27,750	7,818	3,622	364
1939.....	25,813	8,227	3,607	297
1938.....	**24,946**	**8,518**	**3,687**	**213**
1937.....	**24,599**	**8,579**	**3,562**	**233**
1936.....	**24,522**	**8,505**	**3,719**	**459**
1935.....	**23,293**	**9,478**	**3,187**	**204**
1934.....	**23,296**	**9,115**	**2,962**	**218**
1933.....	**25,177**	**8,945**	**3,032**	**236**
1932.....	**26,395**	**8,533**	**3,154**	**454**
1931.....	**25,586**	**8,279**	**3,214**	**641**
1930.....	**23,960**	**8,286**	**4,755**	**571**
1929.....	**24,297**	**7,732**	**5,114**	**373**

WORLD WHEAT ACREAGE

Wheat acreage harvested in the principal wheat raising countries of the world for the past 10 years. This report is compiled from the International Institute of Agriculture and from reports of the United States Department of Agriculture. Figures are in thousand acres (i.e., 000's omitted):

	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
N. America—										
Canada	27,182	25,991	23,985	24,116	25,605	25,570	25,930	26,756	28,726	22,372
Mexico	1,100	1,173	1,224	1,143	1,263	1,273	1,240	1,410	1,450	1,368
United States..	57,114	47,910	42,249	51,229	48,863	64,422	69,869	53,482	53,503	56,783
Totals	85,410	75,091	67,458	76,608	75,415	91,265	97,083	81,680	83,700	80,550
South America—										
Argentina	17,789	18,042	17,154	11,688	15,862	‡19,220	‡19,247	‡12,734	‡17,507	‡17,915
Chile	1,470	2,104	2,120	2,051	1,918	1,890	2,045	2,046	1,930	...
Uruguay	947	1,189	1,099	1,267	986	1,375	1,256	1,165	926	1,042
Peru	...	...	...	...	...	...	301	335	321	...
Totals	20,206	21,335	20,373	15,219	20,407	22,485	23,800	17,200	21,600	22,100
Europe—										
Austria	534	543	573	691	624	¶..	¶..	¶..	¶..	¶..
Belgium	386	372	371	287	424	425	429	305	354	...
Bulgaria	3,121	3,097	3,114	2,729	2,955	3,234	3,448	3,036	3,508	3,500
Czecho-Slovakia ...	2,063	2,272	2,300	2,380	2,291	2,108	¶¶1,200	¶¶1,050	¶¶1,050	¶¶1,100
Denmark	245	261	280	312	296	319	325	330	199	203
Esthonia	128	155	161	155	162	168	172	185	...	...
Finland	59	91	125	174	208	279	323	336	344	...
France	13,427	13,503	13,354	13,252	12,865	12,591	12,479	¶11,683	...	...
Germany	5,636	5,727	5,430	5,205	5,151	¶5,522	5,656	6,002	...	...
Greece	1,498	1,712	1,956	2,092	2,065	2,118	2,126	‡2,356	‡2,599	‡3,297
Hungary	3,793	3,924	3,798	4,135	4,029	3,665	4,000	¶4,625	¶4,313	...
Ireland	21	50	94	163	255	220	230	255	305	491
Italy	12,185	12,587	12,274	12,367	12,693	12,782	12,432	12,841	12,566	12,207
Jugoslavia	4,820	5,137	5,002	5,313	5,463	5,263	5,262	5,444	5,182	...
Latvia	255	309	351	347	319	339	348	378	...	...
Lithuania	509	499	514	536	491	521	501	512	498	...
Luxemburg ...	31	34	40	43	45	46	57	42	35	...
Malta	10	10	9	9	10	9	10	10	...	...
Netherlands ..	297	338	366	380	374	318	311	306	332	...
Norway	28	28	46	59	75	79	86	102	100	...
Poland	4,265	4,187	4,314	4,335	4,305	4,184	4,335	4,356	...	...
Portugal	1,460	1,424	1,344	1,377	1,157	1,219	1,134	1,248	...	1,260
Roumania	7,091	7,700	7,609	8,496	8,481	8,777	9,435	10,079	††4,564	...
Russia	85,300	82,040	87,106	91,528	96,116	101,247	102,550	...	...	...
Spain	11,248	11,168	11,386	11,254	10,768	*9,884	8,648	8,639	8,735	9,547
Sweden	688	799	718	674	695	734	762	833	763	708
Switzerland	137	140	165	150	172	174	183	188	191	...
United Kingdom—										
England and Wales	1,288	1,660	1,759	1,772	1,704	1,732	1,928	1,767	...	...
N. Ireland ..	3	6	9	9	7	4	6	3	...	...
Scotland	52	78	98	101	94	100	92	81	...	...
Totals† ...	75,278	77,811	77,560	78,304	78,178	76,383	75,918	76,992	45,642	31,313
Africa—										
Algeria	3,736	3,993	4,068	4,095	4,287	4,311	4,101	4,084	...	...
Egypt	1,762	1,426	1,442	1,463	1,464	1,421	1,470	1,501	1,563	1,561
Morocco	2,713	3,210	3,018	3,616	3,194	3,027	2,999	3,188	...	...
South Africa..	1,530	1,257	1,872	2,499	2,133	1,751	2,083	2,131	...	...
Tunis	2,392	1,754	1,903	1,829	1,221	2,429	1,665	2,104	1,359	1,347
Totals	12,133	11,640	12,303	13,006	12,299	12,939	12,318	13,008	2,922	2,908
Asia—										
Chosen	793	790	798	800	818	839	846	859	...	...
Cyprus	170	175	160	190	190	184	190	195	...	...
India	33,803	32,976	35,992	34,490	33,639	33,215	35,640	35,441	34,003	34,862
Japan	1,247	1,511	1,589	1,627	1,688	1,752	1,777	1,827	2,062	2,027
Syria and Lebanon	1,118	1,212	1,175	1,293	1,316	1,373	1,404	1,429	...	1,600
Turkey	8,560	7,256	7,625	8,474	8,724	8,266	9,507	9,818	...	...
Totals	45,691	43,920	47,339	46,874	46,375	45,629	49,364	49,569	36,065	38,489
Australasia—										
Australia	15,770	14,901	12,499	11,924	12,351	13,686	14,346	13,284	12,454	12,654
New Zealand..	303	295	231	252	225	186	189	258	243	258
Totals	16,073	15,196	12,730	12,191	12,576	13,872	14,535	13,542	12,697	12,912
Grand totals†.	254,251	244,993	237,763	242,202	245,250	263,004	273,018	251,991‖	202,626‖	188,272
Estimated world totals	...	...	...	...	...	...	...	...	405,230	404,200	403,300

*Unofficial estimate. †Not including Russia. ‡Seeded. ¶Austria included with Germany. §New boundaries; not strictly comparable with previous years. ††Not including Bessarabia and northern Bucovina. ‖Incomplete. ¶¶Estimate of area not included with Germany and Hungary.

WORLD WHEAT YIELDS PER ACRE

Yield of wheat in bushels per acre, as compiled from official sources by the Food Research Institute, Stanford University:

	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931	1930	1929
Mexico	9.2	10.5	9.5	9.2	10.8	9.4	9.0	10.3	8.8	10.8	9.4	8.8
Argentina	15.5	6.7	17.6	10.0	13.0	10.0	12.8	14.6	12.2	12.7	10.9	7.9
Australia	6.6	15.8	10.8	13.6	12.3	12.1	10.6	11.9	13.6	12.9	11.8	8.5
Canada	19.2	19.5	13.9	7.0	8.6	11.7	11.5	10.8	16.3	12.2	16.9	12.1
United States	13.2	11.8	11.7	10.8	8.5	9.0	8.3	8.1	11.5	14.2	13.2	12.3
Uruguay	7.7	8.5	12.3	12.0	9.3	11.9	9.7	12.4	5.7	10.4	7.7	12.0
Chile	15.0	15.4	17.4	16.0	14.9	16.6	14.1	16.8	19.5	14.0	13.2	19.4
Hungary	17.6	24.4	24.7	19.7	21.8	20.3	17.0	24.6	17.0	18.1	20.1	20.2
Jugoslavia	13.4	19.4	21.2	16.4	19.7	13.8	13.6	18.8	11.1	18.7	15.3	18.2
Roumania	10.8	16.2	18.8	15.7	15.2	11.3	10.0	15.5	7.8	15.8	17.3	14.7
Bulgaria	17.6	23.4	22.9	20.1	20.4	17.5	12.7	17.9	15.4	20.9	19.1	12.5
Morocco	..	12.2	7.7	6.9	3.8	5.5	13.1	9.0	10.3	11.7	7.2	10.6
Algeria	..	10.4	8.5	7.7	6.9	8.2	10.6	8.0	7.8	7.0	8.1	8.8
Tunis	7.9	8.9	8.4	7.3	6.6	8.3	7.1	5.3	7.3	7.1	5.5	7.1
United Kingdom	..	35.0	38.0	30.7	30.7	34.8	37.3	35.9	32.5	30.2	30.1	36.1
Eire	38.3	40.7	32.2	31.8	30.7	41.0	40.4	39.6	39.5	37.1	40.4	40.7
France	24.5	23.4	28.9	20.5	19.8	21.5	25.3	26.8	27.1	20.6	17.2	25.3
Italy	20.8	22.8	24.2	23.2	17.7	22.9	19.0	23.7	22.7	20.6	17.6	22.1
Germany	}		‡ ‡40.7	†33.6	‡31.6	32.0	30.6	35.9	32.6	29.0	31.6	31.1
Austria	}	..‡34.4	} 26.2	23.7	22.4	25.8	23.2	26.9	22.8	21.3	23.6	22.4
Czecho-Slovakia	30.5	33.3	30.0	24.4	24.3	26.1	21.7	32.1	26.1	20.1	25.8	26.2
Switzerland	31.7	31.3	40.1	32.0	26.1	35.5	33.6	35.1	29.2	30.1	26.9	32.6
Belgium*	22.8	39.8	45.2	35.7	36.7	36.5	42.1	39.7	38.6	35.2	31.4	35.8
Netherlands	30.1	50.0	51.1	39.9	41.2	43.9	49.1	45.3	43.1	35.2	42.6	48.8
Denmark	34.5	46.7	52.0	42.3	38.2	47.1	45.7	44.1	44.9	38.8	41.0	45.3
Norway	25.3	28.0	30.7	31.6	27.9	31.7	26.1	27.1	26.8	20.3	24.0	25.0
Sweden	20.3	37.6	39.6	34.2	31.1	35.0	38.7	35.2	35.0	24.9	32.1	33.1
Spain	9.1	12.2	11.1	11.1	11.3	14.0	16.4	12.4	16.4	12.0	13.2	14.5
Portugal	..	15.2	14.0	12.0	7.5	16.0	18.4	10.6	16.3	10.2	12.3	9.9
Poland	..	19.1	18.4	16.9	18.2	17.1	17.4	19.1	11.6	18.5	20.2	18.7
Lithuania, Latvia and Estonia	..	18.7	19.0	16.9	15.9	17.4	20.9	18.0	18.5	16.9	20.9	16.9
Finland	20.1	25.3	29.1	27.5	25.3	24.3	26.2	27.0	25.1	24.9	24.7	22.4
Greece	12.8	16.2	16.9	14.2	9.5	13.0	13.1	16.6	11.4	7.5	6.9	9.2
Turkey	..	17.8	16.5	16.4	16.2	10.9	12.8	14.8	8.1	12.0	14.7	15.7
Egypt	32.1	32.7	31.2	32.0	31.3	29.6	25.9	28.0	29.9	27.9	26.1	28.0
Japan	32.1	33.4	25.4	28.3	26.7	29.9	30.0	26.8	26.2	26.3	25.8	26.4
Chosen	11.9	14.7	12.3	12.3	10.0	12.1	11.7	11.3	11.3	10.6	11.4	9.5
Manchukuo	11.0	9.8	12.8	13.9	12.8	14.0	11.7	15.4	11.4	14.9	14.7	15.0
South Africa	..	7.2	8.2	6.1	7.9	10.3	8.8	9.7	6.9	7.9	7.3	9.8
New Zealand	34.2	31.0	29.4	32.5	32.3	35.6	26.4	31.6	36.5	24.5	30.4	30.7

*Includes Luxemburg. †Includes Sudeten. ‡Includes the Saar.

WORLD WHEAT CROP

Wheat crops of the principal countries of the world, as compiled from the International Institute of Agriculture and various surveys of the United States Department of Agriculture. Southern hemisphere crops are shown in the year in which they competed with northern hemisphere crops. Figures are in million bushels, with one decimal place being shown:

Country—	1909-13	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
North America—Canada.	197.2	566.7	304.5	420.7	321.3	443.1	281.9	275.8	281.9	219.2	182.4	350.0	520.6	540.2	299.4
Guatemala	.3	.2	.2	.2	.1	.2	.2	...	...	...	...	...	...	...	...
Mexico	11.5	11.0	11.3	11.5	16.2	9.7	12.1	10.9	10.7	13.6	11.2	9.0	14.8	13.2	11.7
United States	690.1	914.4	823.2	886.4	941.7	756.9	55.1	526.4	626.3	626.7	875.6	931.7	751.4	812.4	945.9
Totals	899.1	1,492.3	1,139.1	1,318.8	1,278.3	1,209.9	845.9	814.2	918.9	859.5	1,069.2	1,293.6	1,286.8	1,365.9	1,257.0
South America—															
Argentina	147.1	349.1	162.6	232.3	219.7	240.9	286.1	240.7	141.5	249.2	184.8	379.1	130.7	299.5	227.8
Brazil	1.5	4.6	6.3	5.0	6.0	5.7	5.3	5.4	5.2	...	...	...	...	...	...
Chile	20.1	29.7	33.5	21.2	21.2	26.1	35.3	30.1	31.8	28.7	30.3	35.5	31.6	28.6	27.1
Peru	2.6	3.1	4.4	4.5	3.5	3.1	2.7	1.8	2.1	3.0	3.3	3.8	4.2	3.7	4.0
Uruguay	6.5	12.3	13.2	7.4	11.3	5.4	14.7	10.7	15.1	9.2	16.6	15.5	9.9	7.1	...
Totals	177.8	398.8	220.0	270.4	261.7	281.2	344.1	288.7	195.7	290.1	235.0	433.9	176.4	338.9	258.9
Europe—															
Albania	...	...	...	...	...	...	2.4	1.6	2.0	1.1	1.6	1.4	...	...	...
Austria	12.8	12.9	11.6	12.0	11.0	12.2	14.6	13.3	15.6	14.0	14.5	¶..	¶..	...	...
Belgium	15.2	17.2	13.2	13.2	13.8	15.4	15.1	16.8	16.1	16.2	15.6	20.1	12.8	...	...
Bulgaria	37.8	49.2	33.2	57.3	63.8	48.1	55.5	39.6	47.9	60.3	64.9	79.0	69.0	61.8	...
Czecho-Slovakia	37.9	51.5	52.9	50.6	41.2	53.7	72.9	50.0	62.1	55.6	51.2	§66.7	§40.0	§32.0	§35.0
Denmark	6.3	12.2	11.8	10.2	10.1	11.0	11.5	12.8	14.7	11.3	13.5	16.9	15.4	7.0	7.0
Esthonia (U.S.S.R.)	.4	1.0	1.3	1.6	1.7	2.1	2.5	3.1	2.3	2.4	2.8	3.1	3.1	2.8	...
Finland	.1	1.9	.8	.9	1.1	1.5	2.5	3.3	4.2	5.3	7.7	9.4	8.5	6.6	6.2
France	325.6	281.3	337.3	228.1	264.1	333.5	362.3	338.5	284.9	254.6	257.8	360.1	273.5	188.0	...
Germany	131.3	141.6	123.1	139.2	155.5	183.8	205.9	166.5	171.5	162.7	179.6	221.2	202.8	...	...
Greece	16.3	13.1	11.4	9.7	11.3	17.1	28.4	25.7	27.1	19.5	32.4	36.0	38.2	32.9	23.9
Hungary	71.5	99.2	75.0	84.3	72.5	64.5	96.4	64.8	84.2	87.8	72.2	98.8	113.1	76.0	...
Italy	184.4	228.6	260.1	210.1	244.4	276.9	298.5	233.1	282.8	224.6	296.3	300.7	293.2	261.3	262.7
Jugoslavia	62.0	103.3	95.0	80.3	98.8	53.4	96.6	68.3	73.1	107.4	86.2	111.3	105.7	69.3	...
Luxemburg	.6	.7	.3	.4	.4	.7	1.0	1.2	1.0	1.1	1.2	1.8	1.0	...	...
Latvia	1.5	2.5	2.3	4.1	3.4	5.3	6.7	8.1	6.5	5.3	6.3	7.1	7.8	...	...
Lithuania	3.3	6.3	9.3	8.9	8.3	9.4	8.2	10.5	10.1	8.0	8.1	9.2	9.4	...	...
Malta	.2	.3	.3	.3	.3	.3	.3	.3	.2	.2	.3	.3	.3	...	...
Netherlands	5.0	7.3	5.5	6.1	6.8	12.8	15.3	18.0	16.7	15.4	12.6	15.9	15.3	...	...
Norway	.3	.8	.8	.7	.6	.7	.8	1.2	1.9	2.1	2.5	2.6	2.9	2.6	...
Poland	61.7	59.2	65.9	82.3	83.2	49.5	79.9	76.4	73.9	78.4	70.8	79.8	83.4	...	...
Portugal	11.9	7.5	10.6	13.5	13.0	23.8	15.1	24.7	22.1	8.6	14.7	16.8	19.0	9.9	15.4
Roumania	158.7	115.5	99.8	130.8	135.3	55.5	119.1	76.6	96.4	128.7	138.2	177.2	163.6	89.3	...
Spain	130.4	119.9	154.2	146.7	134.4	184.2	138.2	186.8	157.9	121.5	‡110.0	96.0	105.4	79.4	108.9
Switzerland	3.3	4.2	4.2	3.6	4.0	4.0	5.0	5.3	5.9	4.5	6.2	7.3	5.9	6.1	...
Sweden	8.1	19.2	19.0	20.8	17.0	26.5	26.3	28.4	23.6	21.6	25.7	29.5	31.6	15.5	12.5
Ireland	1.3	1.2	1.2	1.1	.8	.8	1.9	3.8	6.7	7.8	7.0	7.4	10.4	11.7	...
United Kingdom—															
England, Wales	55.8	47.3	47.5	40.0	35.9	41.3	58.7	65.3	60.6	51.4	52.0	69.3	58.1	...	...
Scotland	2.3	2.3	2.2	2.1	1.8	2.2	3.5	4.1	4.5	3.5	4.2	3.9	3.4	...	...
North Ireland	.3	.2	.1	.2	.1	.1	.2	.4	.4	.3	.2	.2	.2	...	...
Totals	1,346.3	1,406.6	1,449.9	1,359.1	1,434.6	1,490.5	1,745.2	1,548.6	1,577.0	1,481.3	1,556.3	1,848.0	1,399.9	952.2	471.6
Africa—															
Morocco	17.0	28.1	31.8	21.3	29.8	28.0	28.9	39.6	20.0	12.2	20.9	23.2	38.8	23.9	...
Algeria	35.2	30.3	33.2	32.4	25.6	29.2	32.0	43.5	33.5	29.8	33.1	34.9	42.6	27.6	32.0
Egypt	33.7	37.3	45.2	39.8	46.1	52.6	39.9	37.3	43.2	45.7	45.4	45.9	49.0	50.0	41.5
Tunis	6.2	13.7	12.3	10.4	13.9	17.5	9.2	13.8	16.9	8.1	17.6	14.0	18.6	10.7	15.1
South Africa	6.0	7.2	10.6	9.3	13.7	10.6	11.8	16.9	20.2	16.1	10.2	17.4	15.3	15.6	14.5
Totals	98.1	116.6	133.1	113.2	129.1	137.9	121.8	151.1	133.9	111.9	127.2	135.5	164.3	127.8	103.1
Asia—															
Chosen	6.9	8.6	8.3	9.0	8.3	8.6	8.9	9.3	9.7	8.1	10.2	10.4	12.6	10.2	...
Cyprus	2.2	1.6	2.2	1.9	1.6	1.2	1.6	2.2	2.5	1.8	2.2	2.0	2.2	...	...
Japan	25.1	30.8	30.5	29.5	30.9	31.3	40.4	48.4	48.7	45.2	50.4	45.2	61.1	66.1	53.8
India	351.8	290.9	320.7	390.8	347.4	336.9	352.9	351.8	363.2	352.2	364.0	401.9	372.0	402.0	373.5
Turkey	...	59.2	99.9	91.3	102.4	68.9	99.6	99.7	92.6	141.6	133.0	156.7	154.5	150.8	128.6
Palestine	...	2.4	3.3	3.2	2.9	1.9	1.6	3.0	3.8	2.8	4.7	1.6	3.3	5.1	3.7
Syria and Lebanon	...	6.5	16.2	18.6	14.2	9.8	13.5	13.4	18.5	15.7	17.2	23.7	22.3	24.6	27.6
Totals	386.0	400.0	480.9	544.3	507.7	458.6	578.5	527.8	539.0	567.4	581.7	640.9	628.0	658.8	587.2
Australasia—															
Australia	90.5	159.8	126.9	213.6	190.6	213.9	177.3	133.4	144.2	150.6	188.0	155.4	210.3	82.7	162.1
New Zealand	6.9	8.8	7.2	7.6	6.6	11.1	9.0	5.9	8.8	7.2	6.0	5.6	8.0	8.3	8.8
Totals	97.4	168.6	134.1	221.2	197.2	225.0	186.3	139.3	153.0	157.8	194.0	154.5	218.3	91.0	170.9
Grand totals*	3,004.7	3,982.9	3,560.1	3,833.6	3,809.6	3,803.1	3,761.8	3,469.7	3,517.5	3,468.0	3,763.4	4,506.4	3,873.7	¶3,534.6	¶2,848.7
Russia	757.3	807.3	693.6	989.1	753.0	744.1	1,018.9	1,117.3	1,132.8	1,135.1	1,623.6	1,494.0	...	...	...
Dept. of Agriculture*†	2,966.0	3,995.0	3,573.0	3,851.0	3,856.0	3,854.0	3,809.0	3,534.0	3,582.0	3,579.0	3,852.0	5,946.0	5,517.8	5,320.4	5,271.0

*Excluding Russia and China. †Estimates include some minor areas not listed above. ‡Unofficial estimate. ¶Austria included with Germany. ‖Not including Bessarabia and northern Bucovina. §Incomplete.

World Wheat Calendar

Significant of the universal use of wheat is the fact that every month in the year there is a wheat harvest taking place in some part of the world. The sowing and harvesting periods for wheat in the chief growing countries are shown in the following table, compiled by the Department of Agriculture:

SOWING

	Spring	Winter
United States	March-May	Aug.-Oct.
Canada	March-May	Sept.-Oct.
Mexico	May	Oct.-Dec.
British Isles	March-April	Aug.-Oct.
Scandinavia	March-April	Sept.-Dec.
Baltic countries	April	Aug.-Sept.
Danube Basin	March-April	Sept.-Dec.
Netherlands	March-April	Sept.-Oct.
Belgium	March-April	Sept.-Nov.
France	March-April	Oct.-Nov.
Spain and Portugal		Oct.-Nov.
Italy		Sept.-Nov.
Greece		Sept.-Nov.
Poland	March-April	Sept.-Oct.
Germany	March-April	Sept.-Oct.
Austria and Czechoslovakia	March-April	Sept.-Oct.
Russia	March-June	Aug.-Nov.
French North Africa		Nov.-Jan.
Egypt		Nov.-Dec.
South Africa		April-June
Argentina		May-June
Brazil		June-July
Chile		June-July
China	April-May	Sept.-Oct.
India	Oct.-Dec.	
Japan		Oct.-Nov.
Turkey		Oct.-Nov.
Australia		May-July
New Zealand		May-July

HARVESTING

United States	May-Aug.
Canada	July-Sept.
Mexico	April-May
British Isles	July-Sept.
Scandinavia	July-Sept.
Baltic countries	Aug.-Sept.
Danube Basin	June-July
Netherlands	July-Aug.
Belgium	July-Aug.
France	June-Aug.
Spain and Portugal	May-July
Italy	June-July
Greece	June-July
Poland	June-Aug.
Germany	July-Aug.
Austria and Czechoslovakia	June-Aug.
Russia	June-Sept.
French North Africa	March-May
Egypt	April-May
South Africa	Nov.-Dec.
Argentina	December
Brazil	Nov.-Dec.
Chile	Dec.-Jan.
China	May-Aug.
India	April-May
Japan	May-June
Turkey	May-June
Australia	Nov.-Dec.
New Zealand	Dec.-Jan.

Canadian Wheat Crops and Carry-Over

Canadian wheat production and carry-over at end of crop years, in bushels (000's omitted):

	Production	Carry-over
1941	302,626	.....
1940	551,390	480,084
1939	520,623	273,086
1938	360,010	95,013
1937	182,410	23,411
1936	216,740	32,739
1935	277,339	108,747
1934	275,849	203,945
1933	281,892	219,428
1932	443,061	137,723
1931	321,326	140,577
1930	420,672	127,160
1929	304,520	126,989
1928	566,726	91,231
1927	479,665	52,676
1926	407,136	38,482
1925	395,475	28,482
1924	262,097	44,077
1923	474,199	12,233
1922	399,785	21,020
1921	300,858	14,026

WORLD OAT CROP

Acreage and production of oats in the principal producing countries of the world, as reported by the United States Department of Agriculture and the International Institute of Agriculture, in thousands (i.e., 000's omitted):

	Acreage				Production			
Americas—	1938	1939	1940	1941	1938	1939	1940	1941
United States	35,661	32,968	35,393	37,972	1,068,431	935,942	1,246,050	1,176,107
Canada	13,010	12,790	12,298	13,841	394,593	408,432	380,526	346,154
Argentina	¶3,361	¶3,446	3,899	...	50,293	60,117	60,627	.....
Chile	337	257	...	...	10,519	.....	.....	.....
Uruguay	246	219	...	...	3,589	3,073	.....	.....
Europe—								
Belgium	527	640	...	413	42,738	49,893	.....	.....
Bulgaria	355	358	371	...	6,137	7,854	9,381	.....
Czecho-Slovakia	1,902	894	‖365	‖370	87,496	‖14,363	.....	.....
Denmark	926	930	857	846	78,829	69,646	62,445	50,637
Esthonia (U.S.S.R.)	368	356	...	...	12,160	10,296	10,196	.....
Finland	1,143	1,166	1,054	1,052	56,883	52,922	34,776	37,823
France	8,019	8,010	...	...	375,986	363,153	284,215	.....
Germany**	7,917	8,112	9,191	...	496,727	473,144	508,347	.....
Greece	¶383	¶357	¶399	¶331	10,505	10,480	10,518	9,210
Great Britain	2,396	2,423	...	...	139,419	78,330	.....	.....
Hungary	554	633	793	...	21,382	25,209	29,922	.....
Ireland	570	537	681	776	39,133	37,776	50,694	.....
Italy	1,093	1,038	1,092	...	43,342	37,690	39,318	.....
Jugoslavia	917	852	870	...	22,496	23,993	19,835	.....
Latvia	860	935	...	...	30,769	33,402	.....	.....
Lithuania (USSR)	838	941	944	...	29,936	30,078	.....	.....
Luxemburg	61	67	...	...	2,864	3,314	.....	.....
Norway	211	215	...	...	13,554	13,833	10,946	.....
Netherlands	369	403	343	...	30,765	30,950	.....	.....
Poland	5,627	5,734	...	...	183,015	198,415	.....	.....
Portugal	618	601	...	370	6,530	6,743	1,725	6,200
Roumania	1,609	1,455	1,016	1,112	31,904	33,548	31,349	.....
Russia	*41,196	*45,548	...	...	1,091,128	.....	.....	.....
Spain	...	1,423	1,597	1,646	21,977	32,966	32,685	38,964
Sweden	1,647	1,631	1,569	1,552	95,127	87,570	64,562	53,455
Switzerland	28	31	53	...	1,750	1,798	3,562	.....
Syria and Lebanon	24	12	...	...	682	375	.....	.....
Turkey	613	712	...	...	17,748	20,530	16,328	.....
Africa—								
Algeria	451	516	...	...	10,892	15,157	6,900	8,000
Tunis	99	99	...	...	2,067	2,067	.....	.....
Morocco	120	131	...	...	3,275	5,236	.....	.....
New Zealand	...	50	72	60	3,256	2,601	3,894	3,375
Totals	134,056	136,520	†72,857	†60,341	4,537,897	3,180,896	†2,918,801	†1,729,925
Estimated world totals	...	140,500	142,600	147,200	.....	4,496,000	4,586,000	4,489,000

*Planned. †Incomplete. ¶Seeded. **Austria, Sudetenland and Memel included with Germany. ‖Slovakia.

China and Manchukuo—Wheat Crops

Estimated wheat crops of China and Manchukuo, as reported by the United States Department of Agriculture, in thousand bushels:

	China	Manchukuo
1941	720,000	29,800
1940	700,000	27,558
1939	667,000	31,232
1938	640,000	34,318
1937	636,446	41,373
1936	847,948	35,237
1935	782,724	37,000
1934	824,316	23,900
1933	826,901	52,535

WORLD CORN CROP

Acreage and production of corn in the principal producing countries of the world, as reported by the United States Department of Agriculture and the International Institute of Agriculture, in thousands (i.e., 000's omitted):

	Acreage				Production			
Americas—	1938	1939	1940	1941	1938	1939	1940	1941
United States	92,222	88,430	86,738	86,089	2,562,197	2,602,133	2,460,624	2,672,541
Mexico	7,638	8,072	8,257	8,459	66,637	77,820	64,551	77,153
Argentina	‡13,096	‡17,791	‡15,067	...	191,485	408,442	403,048	.....
Canada	180	183	186	300	7,690	8,097	6,956	12,036
Europe—								
Germany§	347	271	249	...	14,944	9,400	8,500	.....
Bulgaria	1,731	1,736	...	...	20,955	37,427	43,305	.....
Czecho-Slovakia	445	...	...	...	14,391	.....	.....	.....
France	841	814	...	...	22,779	23,829	17,761	.....
Greece	686	684	546	...	7,853	10,295	11,600	7,900
Hungary	2,901	3,113	3,271	...	104,799	91,906	116,686	.....
Italy§	3,724	3,606	...	...	115,729	101,648	135,000	122,000
Jugoslavia	6,801	6,625	6,986	...	187,229	159,267	172,441	.....
Poland	218	...	...	...	4,969	.....	.....	.....
Portugal	971	...	...	976	11,662	.....	14,960	14,763
Roumania	12,349	12,186	11,325	11,700	201,459	238,227	205,000	.....
Switzerland	2	...	...	...	96	.....	.....	.....
Spain	...	1,101	1,118	...	.....	33,197	29,202	27,479
Russia	6,446	6,150	...	...	*108,592	.....	.....	.....
Others—								
Manchukuo	4,124	4,885	...	...	90,507	91,561	110,230	102,356
Turkey	1,170	1,159	...	...	23,096	25,032	29,800	29,900
Syria and Lebanon	48	49	...	...	1,081	.....	.....	.....
Algeria	15	16	...	...	168	.....	.....	.....
Egypt	1,554	1,607	1,600	1,560	61,834	60,009	60,020	49,752
Morocco	1,141	...	...	...	8,558	.....	.....	.....
Tunis	43	62	...	...	217	.....	.....	.....
Union of So. Africa	6,215	6,724	...	...	10,939	.....	.....	.....
Totals	164,908	165,264	†135,343	†109,084	3,839,866	3,978,290	†3,889,624	†3,115,880
Estimated world totals	216,600	219,000	215,100	211,000	4,883,000	5,105,000	5,013,000	4,944,000

§Unofficial. *Planned. †Incomplete. ‡Seeded.

WORLD BARLEY CROP

Acreage and production of barley in the principal producing countries of the world, as reported by the United States Department of Agriculture and the International Institute of Agriculture, in thousands (i.e., 000's omitted):

	Acreage				Production			
	1938	1939	1940	1941	1938	1939	1940	1941
United States	10,513	12,644	13,496	14,049	253,005	274,767	310,108	358,709
Canada	4,454	4,347	4,342	5,549	102,242	103,147	104,256	116,659
Argentina	¶2,053	¶2,121	¶2,146	¶1,972	20,209	39,093	36,238	17,591
Chile	203	132	128	...	5,005	3,361	3,445	.....
Uruguay	52	62	...	...	638	772	.....	.....
Belgium	76	48	57	74	4,098	2,348	.....	.....
Bulgaria	555	563	...	...	16,294	15,332	14,422	.....
Czecho-Slovakia	1,631	644	‡497	‡489	59,617	27,672	‡13,999	‡12,172
Denmark	982	1,040	973	930	62,438	56,954	53,234	42,530
Esthonia (U.S.S.R.)	217	207	...	...	4,443	4,136	3,812	.....
Finland	298	294	281	325	9,524	8,658	6,377	6,706
France	1,876	1,975	...	...	59,286	62,353	48,689	.....
Germany§	...	4,827	5,645	...	220,467	194,269	208,337	.....
Greece	541	532	547	469	11,276	10,318	10,215	9,215
Great Britain	987	1,012	...	...	42,199	37,053	‖45,833	.....
Hungary	1,121	1,321	1,300	...	33,253	36,265	††31,834	.....
Ireland	118	74	132	169	5,142	3,654	6,487	.....
Italy	492	506	502	...	11,386	10,816	10,057	.....
Jugoslavia	1,049	1,027	1,001	...	19,349	19,485	17,054	.....
Latvia	440	445	...	...	10,131	10,209	.....	.....
Lithuania (USSR)	519	550	558	...	12,586	12,294	.....	.....
Luxemburg	5	5	...	...	140	156	.....	.....
Malta	5	5	...	...	213	205	.....	.....
Norway	148	116	...	...	5,711	4,753	4,290	.....
Netherlands	107	102	107	...	6,452	6,708	.....	.....
Poland	2,910	2,926	...	...	62,986	67,975	.....	.....
Portugal	186	158	151	...	1,791	1,800	1,202	1,500
Roumania	3,158	2,708	2,795	...	38,223	37,497	51,119	.....
Russia	*20,599	*23,027	...	...	*340,769	.....	.....	.....
Spain	...	3,381	3,859	3,886	33,897	65,128	64,101	77,391
Switzerland	11	12	...	...	423	390	.....	.....
Sweden	272	258	264	241	12,241	10,643	8,694	7,211
China¶¶	...	8,287	8,285	8,491	.....	210,206	197,109	169,473
Chosen	2,738	2,762	2,913	...	51,100	56,904	58,785	.....
Japan	1,892	1,871	1,826	2,041	64,182	81,666	77,498	75,803
Palestine	502	509	...	...	3,065	.....	.....	.....
Syria and Lebanon	838	888	...	939	17,611	16,994	17,683	18,372
Turkey	4,853	4,939	...	3,706	110,272	105,392	103,570	52,819
Algeria	2,909	3,063	...	...	26,967	50,524	16,500	32,000
Tunis	756	1,483	865	1,112	4,593	16,075	4,134	9,186
Morocco	4,155	3,978	4,720	...	49,869	97,737	.....	.....
Egypt	274	273	278	264	10,686	10,939	11,072	9,788
New Zealand	¶33	¶31	...	...	1,122	.....	.....	.....
Totals	74,528	95,153	†57,668	†44,706	1,804,901	1,774,648	†1,540,154	†1,017,125
Estimated world totals	...	116,000	119,500	97,500	.....	2,545,000	2,510,000	2,491,000

*Planned. †Incomplete. ¶Area sown. §Austria, Sudetenland and Memel included with Germany. ††Including reannexed northern zone and Sub-Carpathia. ‖Unofficial estimate. ‡Slovakia. ¶¶15 provinces of unoccupied China.

WORLD RYE CROP

Following are the estimates of acreage and production of rye in the leading producing countries of the world, as reported by the United States Department of Agriculture and the International Institute of Agriculture, in thousands (i.e., 000's omitted):

	Acreage				Production			
	1938	1939	1940	1941	1938	1939	1940	1941
Canada	741	1,102	1,035	1,078	10,988	15,307	13,994	12,956
United States	4,021	3,832	3,210	3,498	55,564	39,049	41,149	45,191
Argentina	‡2,254	‡2,296	‡2,751	...	10,826	14,566	8,354	6,299
Austria	¶..	¶..	...	...	¶....	¶.....	.....	.....
Belgium	381	335	359	310	15,158	13,755	12,600	.....
Bulgaria	464	447	469	...	7,397	7,716	8,267	.....
Czecho-Slovakia	2,510	$1,950	$1,750	$1,800	66,139	§50,000	§40,000	§45,000
Denmark	359	339	340	474	11,165	9,510	10,714	11,928
Esthonia (U.S.S.R.)	365	372	...	...	7,403	8,693	7,519	.....
Finland	583	539	459	473	14,507	12,029	8,263	10,708
France	1,559	1,601	...	1,490	31,933	29,656	22,941	23,600
Germany	12,150	11,941	...	...	‖381,874	¶372,221	.....	.....
Greece	178	156	163	...	2,439	2,457	2,278	.....
Hungary	1,562	1,718	††1,624	...	31,677	34,004	††28,507	.....
Irish Free State	2	...	...	...	53	.....	.....	.....
Italy	257	260	259	259	5,428	5,962	5,996	5,905
Jugoslavia	640	638	630	...	8,941	9,587	8,311	.....
Latvia	709	737	...	...	14,909	17,635	.....	.....
Lithuania (USSR)	1,247	1,410	1,428	...	24,555	28,434	.....	.....
Luxemburg	18	18	16	...	507	490	.....	.....
Netherlands	601	557	564	...	21,694	23,760	19,000	.....
Norway	13	8	8	...	433	242	215	.....
Poland	14,567	14,745	...	...	285,556	300,382	.....	.....
Portugal	331	311	286	309	4,051	3,890	2,996	2,500
Roumania	1,190	1,107	**426	...	20,362	16,987	12,600	.....
Russia	50,904	44,058	...	...	787,000	.....	.....	.....
Spain	...	1,302	1,361	1,473	13,661	16,144	13,821	15,632
Sweden	498	432	422	509	15,933	13,919	10,468	11,062
Switzerland	39	38	25	25	1,447	1,228	905	.....
Algeria	5	5	...	...	44	44	.....	.....
Turkey	1,138	1,050	...	...	17,656	16,118	16,900	.....
Totals	99,286	93,304	†17,585	†11,698	1,869,300	1,063,785	†295,798	†190,781
Estimated world totals	...	92,600	89,500	89,900	.....	1,672,100	1,462,900	1,519,000

†Incomplete. ‡Seeded. ¶Austria included with Germany. §Estimate of territory not included with Germany and Hungary. **Not including Bessarabia and northern Bucovina. ††Including the reannexed northern zone and Sub-Carpathia.

OCEAN RATES ON WHEAT AND FLOUR

Comparative average monthly ocean rates, in cents per 100 lbs, on flour and wheat from New York to London:

	Jan.	Feb.	Mch.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1941—Flour	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
Wheat	No rates available because of war conditions											
1940—Flour	40.0	40.0	40.0	40.0	40.0	40.0	†40.0	60.0	60.0	60.0	¶70.0	70.0
Wheat	Open rates in effect all year											
1939—Flour	20.5	20.5	19.5	19.5	19.5	19.5	19.5	19.5	*‡.	‡..	‡..	‡..
Wheat	12.9	12.9	12.9	14.3	14.3	14.3	12.9	14.3	...	...	...	...
1938—Flour	23.0	23.0	23.0	23.0	21.0	21.0	21.0	21.0	20.5	20.5	20.5	20.5
Wheat	18.2	18.2	18.2	14.3	14.3	13.7	12.9	12.9	12.9	13.9	12.9	12.9
1937—Flour	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	22.5	22.5
Wheat	12.9	13.9	13.9	13.9	13.9	13.9	14.5	15.6	15.6	20.8	20.8	20.8
1936—Flour	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5
Wheat	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7
1935—Flour	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
Wheat	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
1934—Flour	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
Wheat	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
1933—Flour	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	120.	12.0	12.0
Wheat	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
1932—Flour	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	12.0
Wheat	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1

*19.50 rate until Sept. 11. ‡From Sept. 11 through December, although shipments were rated at 33c, through arrangement with British Cereal Board consignees agreed to adjust to basis of 40c. †July 15 rates changed to 60c. ¶Nov. 7, rates advanced to 70c.

CORNER STONE*
OLD GLORY*
CHIEFTAIN*
GOODHUE*

* We back all four for the particular use to which they are adapted. These flours are as carefully made, from closely selected Minnesota spring wheat, as men and machines can make them.

Our Guarantee Means Something. Write Us.

LA GRANGE MILLS
Red Wing, Minnesota

MEDITERRANEAN DURUM WHEAT CROP

The durum wheat crops of countries in the western Mediterranean basin, as reported to the United States Department of Agriculture (000's omitted):

	Acreage					Production, bus				
Country—	1930-34	1937	1938	1939	1940	1930-34	1938	1939	1940	†1941
Italy	3,771	3,974	...	...	3,363	58,058	73,486	...	*68,000	...
Morocco	2,179	2,137	2,071	2,249	...	20,734	13,426	22,046	14,700	...
Algeria	3,022	3,212	3,037	3,212	...	22,593	23,064	31,048	18,400	23,100
Tunis	1,745	2,026	1,253	1,730	420	9,134	7,183	11,023	7,349	7,700
Totals	10,717	11,349	6,361	7,191	3,783	110,519	117,159	64,117	108,449	30,800

Estimates reported as unofficial but based on best information obtainable.

*Italian wheat production statistics are not broken down into durum and bread wheat; estimates made by the former agricultural attache at Paris indicate that durum has represented at least 25% of the total crop during recent years. Because of favorable conditions reported last year in the durum producing areas of Italy, we have placed the crop at 25.5% of the total production reported at 268,000,000 bus.

†Incomplete.

World Flaxseed Crop

Flaxseed crops of the principal producing countries of the world, as reported by the United States Department of Agriculture and the International Institute of Agriculture, in thousand bushels:

	1941-42	1940-41	1939-40	1938-39
Argentina	65,744	59,839	42,533	55,510
Canada	6,412	3,189	2,169	1,259
India	17,200	19,760	18,640	18,440
Lithuania	.....	1,294	1,295	1,161
Poland	.....	.....	.....	2,692
Uruguay	3,346	2,165	5,296	4,425
United States	31,485	30,886	20,152	8,152
Germany*	....	.....	.....	933
Belgium	....	.....	987	634
Latvia	....	.....	984	803
Egypt	....	117	106	...
Totals	†124,187	117,250†	92,162	94,009

*Including Austria.
†Incomplete.

National Association of Flour Importers

The National Association of Flour Importers was organized in 1903. The principal object is to strengthen the position of the flour trade in the United Kingdom by having a central board representing the different parts of the United Kingdom, to deal with all questions of a national character affecting the trade, leaving local interests to the several individual associations concerned. The association was converted into a limited company in 1934.

Officers of the association: president, E. A. Green (London); vice president, E. A. Keay (Glasgow); treasurer, A. Vaughan Thomas; secretary, Carnaby, Harrower, Barnham & Co.

Controlled Flour Prices in United Kingdom

At the outbreak of war (Sept. 3, 1939) the government assumed control of all flour supplies, both home-milled and imported, and fixed the price of flour which, since Oct. 6, 1941, is as follows per 280 lbs delivered: national straight run, 75% extraction (made mostly from imported wheats), 33s 3d, in returnable bags; all-English wheat flour, 75% extraction (used chiefly for biscuits and cakes), 33s 3d, in returnable bags, or 9d to 1s extra if in nonreturnable bags, according to whether gross or net weight; national wheatmeal, 85% extraction, 33s 3d, in returnable bags; Canadian G. R. (government regulation, export grade) 34s, in nonreturnable bags; Australian, 34s, in nonreturnable bags. A rebate or subsidy is allowed on bread flour to licensed bread bakers of 7s 9d per 280 lbs plus 2@4s per 280 lbs according to quantity of flour used for bread baking. The subsidy payable is according to the following rates:

For the first 100 sacks per week, subsidy 7s 9d plus 4s per 280 lbs.

For the second 100 sacks per week, subsidy 7s 9d plus 3s per 280 lbs.

For any additional quantity exceeding 200 sacks per week, subsidy 7s 9d plus 2s per 280 lbs.

British Millers' Association

The officers of the National Association of British and Irish Millers are: president, James V. Rank; vice president, C. A. Loombe; vice president elect, L. Hector Read; secretary, H. G. Hall. Temporary offices, 19, St. Matthew's Avenue, Surbiton, Surrey.

PRINCIPAL AGRICULTURAL CROPS OF THE UNITED STATES

A Section Devoted to Information Regarding the Acreage, Yield and Value of the Chief Field Crops of the United States, Statistics Being Given Both for the Country as a Whole and by States

UNITED STATES WINTER AND SPRING WHEAT CROP AND ACREAGE

Department of Agriculture estimates of the United States wheat acreage, yield per acre, and total production, with winter and spring wheat estimated separately, by states and calendar years:

WINTER WHEAT

State—	000's omitted Acreage, acres Average 1930-39	1940	1941	Yield per acre, bus Average 1930-39	1940	1941	000's omitted Production, bus Average 1930-39	1940	1941
New York	254	308	292	21.8	26.0	22.5	5,572	8,008	6,570
New Jersey	55	55	55	22.2	23.0	22.0	1,232	1,265	1,210
Pennsylvania	971	874	857	19.7	20.0	19.5	19,229	17,480	16,712
Ohio	2,029	1,958	1,958	20.1	21.5	25.0	40,718	42,097	48,950
Indiana	1,729	1,427	1,470	17.6	19.5	23.5	30,321	27,826	34,545
Illinois	2,016	1,730	1,765	18.0	22.5	20.0	36,413	38,925	35,300
Michigan	810	768	744	20.8	23.5	22.0	16,651	18,048	16,368
Wisconsin	36	39	38	17.0	20.0	17.5	628	780	665
Minnesota	173	167	182	18.0	24.0	14.0	3,146	4,008	2,548
Iowa	387	285	165	17.9	24.5	15.0	6,944	6,982	2,475
Missouri	1,889	1,713	1,336	14.4	19.0	13.5	26,989	32,547	18,036
South Dakota	119	107	150	11.0	10.5	11.0	1,365	1,124	1,650
Nebraska	2,954	2,496	2,221	13.6	13.5	15.5	41,151	33,696	34,426
Kansas	10,767	8,714	11,775	11.8	14.5	14.7	131,460	126,353	173,092
Delaware	85	67	65	17.5	19.0	20.5	1,496	1,273	1,332
Maryland	432	363	345	19.2	19.0	21.0	8,342	6,897	7,245
Virginia	600	527	511	14.4	15.5	15.0	8,643	8,168	7,665
West Virginia	144	118	105	15.0	14.5	15.5	2,154	1,711	1,628
North Carolina	442	443	474	10.9	15.0	15.0	4,807	6,645	7,110
South Carolina	139	218	242	10.0	12.5	13.0	1,364	2,725	3,146
Georgia	143	172	191	9.2	11.0	11.5	1,270	1,892	2,196
Kentucky	391	375	375	14.0	15.0	19.0	5,520	5,625	7,125
Tennessee	393	368	361	11.3	13.5	15.0	4,403	4,968	5,415
Alabama	6	6	7	10.4	12.5	13.0	58	75	91
Arkansas	62	31	30	9.1	11.0	10.5	557	341	315
Oklahoma	4,023	4,020	4,543	11.6	14.5	10.7	47,682	58,290	48,610
Texas	3,124	2,904	2,614	9.6	10.3	10.4	31,360	29,911	27,186
Montana	710	1,180	1,322	14.1	14.8	21.0	10,790	17,464	27,762
Idaho	627	655	628	20.7	26.0	28.0	13,083	17,030	17,584
Wyoming	124	98	147	10.2	12.0	21.5	1,307	1,176	3,160
Colorado	718	756	1,164	11.6	11.7	18.6	8,745	8,845	21,650
New Mexico	229	188	151	9.3	7.5	16.0	2,478	1,410	2,416
Arizona	40	39	27	22.4	20.0	14.5	880	780	392
Utah	182	180	198	16.2	19.0	24.5	2,987	3,420	4,851
Nevada	3	5	5	25.7	28.0	28.0	68	140	140
Washington	1,017	1,053	1,611	24.0	25.5	31.0	24,568	26,852	49,941
Oregon	632	599	671	19.6	20.5	30.0	12,431	12,280	20,130
California	684	783	752	18.2	15.0	15.5	12,605	11,745	11,656
United States	39,141	35,789	39,547	14.4	16.5	17.0	569,417	588,802	671,293

SPRING BREAD WHEAT

State—	000's omitted Acreage, acres Average 1930-39	1940	1941	Yield per acre, bus Average 1930-39	1940	1941	000's omitted Production, bus Average 1930-39	1940	1941
Maine	5	2	2	20.2	21.0	18.0	101	42	36
New York	8	4	4	17.0	18.5	18.0	134	74	72
Pennsylvania	11	10	10	17.9	19.5	18.5	202	195	185
Ohio	9	1	1	17.0	24.0	28.0	158	24	28
Indiana	10	6	6	15.2	18.0	20.0	169	108	120
Illinois	60	15	11	16.1	24.0	20.0	1,038	360	220
Michigan	19	11	11	15.6	22.0	20.5	294	242	226
Wisconsin	73	44	41	16.1	20.5	17.0	1,164	902	697
Minnesota	1,527	1,455	1,319	12.7	19.3	13.5	19,565	28,061	17,958
Iowa	34	27	39	13.3	23.0	12.0	465	621	468
Missouri	8	...	...	12.0	...	...	90	...	...
North Dakota	7,506	8,025	8,234	8.0	11.7	17.8	63,739	93,930	146,198
South Dakota	2,263	2,586	2,714	7.5	9.7	12.3	19,682	25,137	33,480
Nebraska	271	134	131	8.0	7.0	13.5	2,027	938	1,768
Kansas	15	25	24	7.2	8.0	10.0	122	200	240
Montana	2,533	2,737	2,381	9.3	12.5	17.0	24,483	34,212	40,477
Idaho	414	325	325	25.8	28.5	31.5	10,760	9,262	10,238
Wyoming	118	90	93	11.2	12.0	16.0	1,327	1,080	1,488
Colorado	289	272	204	12.8	12.9	16.6	3,704	3,509	3,386
New Mexico	25	20	22	12.9	13.5	14.5	326	270	319
Utah	75	66	68	27.7	31.0	32.0	2,089	2,046	2,176
Nevada	13	13	13	24.2	27.0	27.0	319	351	351
Washington	1,147	1,083	487	17.1	16.0	23.0	19,815	17,328	11,201
Oregon	307	240	144	20.6	19.5	23.0	6,312	4,680	3,312
United States	16,742	17,191	16,284	10.5	13.0	16.9	178,090	223,572	274,644

DURUM WHEAT

State—	000's omitted Acreage, acres Average 1930-39	1940	1941	Yield per acre, bus Average 1930-39	1940	1941	000's omitted Production, bus Average 1930-39	1940	1941
Minnesota	104	89	76	13.2	16.0	15.5	1,407	1,424	1,178
North Dakota	2,108	2,370	2,014	9.2	11.0	17.0	20,600	26,070	34,238
South Dakota	574	570	456	8.0	10.5	14.0	5,591	5,985	6,384
Three states	2,786	3,029	2,546	9.3	11.1	16.4	27,598	33,479	41,800

UNITED STATES BUCKWHEAT CROP AND ACREAGE

Department of Agriculture estimates of the United States buckwheat acreage, yield per acre, and total production, by states and calendar years:

State—	000's omitted Acreage, acres Average 1930-39	1940	1941	Yield per acre, bus Average 1930-39	1940	1941	000's omitted Production, bus Average 1930-39	1940	1941
Maine	11	7	7	17.0	13.0	15.0	192	91	105
Vermont	2	1	1	20.5	17.0	17.0	41	17	17
New York	147	133	106	17.2	16.5	19.0	2,515	2,194	2,014
New Jersey	1	...	...	19.6	...	...	22	...	...
Pennsylvania	140	119	112	17.6	18.5	20.0	2,461	2,202	2,240
Ohio	20	16	9	16.6	18.0	17.5	330	288	158
Indiana	15	9	6	13.7	13.5	12.5	205	122	75
Illinois	6	2	2	14.6	16.0	15.0	96	32	30
Michigan	19	26	18	12.1	17.0	14.5	230	442	261
Wisconsin	15	12	15	11.1	15.5	14.5	165	186	218
Minnesota	21	22	22	9.4	12.5	11.5	193	275	253
Iowa	5	2	2	12.6	16.0	16.0	69	32	32
Missouri	1	1	1	10.1	12.5	9.0	10	12	9
North Dakota	6	2	2	6.1	11.0	14.0	40	22	28
South Dakota	4	1	1	6.8	11.0	8.0	29	11	8
Delaware	1	...	...	10.8	...	...	11	...	...
Maryland	6	5	5	19.2	18.0	20.0	109	90	100
Virginia	14	9	9	12.8	14.5	16.0	174	130	144
West Virginia	19	14	13	16.9	17.5	19.5	319	245	254
North Carolina	4	4	4	14.1	13.0	16.5	56	52	66
Kentucky	2	2	2	9.8	12.0	14.0	20	24	28
Tennessee	2	2	2	12.0	13.0	15.0	24	26	30
United States	460	389	339	16.0	16.7	17.9	7,315	6,493	6,070

UNITED STATES COMBINED WHEAT CROP AND ACREAGE

Department of Agriculture estimates of the United States wheat acreage, yield per acre, and total production, with winter and spring wheat estimated separately, by states and calendar years:

State—	000's omitted Acreage, acres Average 1930-39	1940	1941	Yield per acre, bus Average 1930-39	1940	1941	000's omitted Production, bus Average 1930-39	1940	1941
Maine	5	2	2	20.2	21.0	18.0	101	42	36
New York	262	312	296	21.6	25.9	22.4	5,706	8,082	6,642
New Jersey	55	55	55	22.2	23.0	22.0	1,232	1,265	1,210
Pennsylvania	982	884	867	19.7	20.0	19.5	19,432	17,675	16,897
Ohio	2,038	1,959	1,959	20.1	21.5	25.0	40,876	42,121	48,978
Indiana	1,740	1,433	1,476	17.6	19.5	23.5	30,490	27,934	34,665
Illinois	2,076	1,745	1,776	18.0	22.5	20.0	37,451	39,285	35,520
Michigan	829	779	755	20.7	23.5	22.0	16,945	18,290	16,594
Wisconsin	109	83	79	16.4	20.3	17.2	1,792	1,682	1,362
Minnesota	1,700	1,622	1,501	13.3	19.8	13.7	22,711	32,069	20,506
Iowa	421	312	204	17.4	24.4	14.4	7,408	7,603	2,943
Missouri	1,896	1,713	1,336	14.4	19.0	13.5	27,079	32,547	18,036
North Dakota	7,506	8,025	8,234	8.0	11.7	17.8	63,739	93,930	146,198
South Dakota	2,382	2,693	2,864	7.7	9.8	12.3	21,047	26,261	35,130
Nebraska	3,226	2,630	2,352	13.1	13.2	15.4	43,179	34,634	36,194
Kansas	10,782	8,739	11,799	11.8	14.5	14.7	131,581	126,553	173,332
Delaware	85	67	65	17.5	19.0	20.5	1,496	1,273	1,332
Maryland	432	363	345	19.2	19.0	21.0	8,342	6,897	7,245
Virginia	600	527	511	14.4	15.5	15.0	8,643	8,168	7,665
West Virginia	144	118	105	15.0	14.5	15.5	2,154	1,711	1,628
North Carolina	442	443	474	10.9	15.0	15.0	4,807	6,645	7,110
South Carolina	139	218	242	10.0	12.5	13.0	1,364	2,725	3,146
Georgia	143	172	191	9.2	11.0	11.5	1,270	1,892	2,196
Kentucky	391	375	375	14.0	15.0	19.0	5,520	5,625	7,125
Tennessee	393	368	361	11.3	13.5	15.0	4,403	4,968	5,415
Alabama	6	6	7	10.4	12.5	13.0	58	75	91
Arkansas	62	31	30	9.1	11.0	10.5	557	341	315
Oklahoma	4,023	4,020	4,543	11.6	14.5	10.7	47,682	58,290	48,610
Texas	3,124	2,904	2,614	9.6	10.3	10.4	31,360	29,911	27,186
Montana	3,244	3,917	3,703	10.4	13.2	18.4	35,273	51,676	68,239
Idaho	1,041	980	953	22.7	26.8	29.2	23,842	26,292	27,822
Wyoming	242	188	240	10.7	12.0	19.4	2,634	2,256	4,648
Colorado	1,007	1,028	1,368	12.0	12.0	18.3	12,450	12,354	25,036
New Mexico	254	208	173	9.8	8.1	15.8	2,805	1,680	2,735
Arizona	40	39	27	22.4	20.0	14.5	880	780	392
Utah	257	246	266	19.6	22.2	26.4	5,076	5,466	7,027
Nevada	16	18	18	24.6	27.3	27.3	387	491	491
Washington	2,164	2,136	2,098	20.6	20.7	29.1	44,383	44,180	61,142
Oregon	940	839	815	19.8	20.2	28.8	18,743	16,960	23,442
California	684	783	752	18.2	15.0	15.5	12,605	11,745	11,656
United States	55,884	52,980	55,831	13.3	15.3	16.9	747,507	812,374	945,937

UNITED STATES CORN CROP AND ACREAGE

Department of Agriculture estimates of the United States corn acreage, yield per acre, and total production, for all purposes, by states and calendar years:

State—	000's omitted Acreage, acres Average 1930-39	1940	1941	Yield per acre, bus Average 1930-39	1940	1941	000's omitted Production, bus Average 1930-39	1940	1941
Maine	12	17	17	38.6	39.0	41.0	483	663	697
New Hampshire	15	15	15	41.2	40.0	42.0	621	600	630
Vermont	74	67	69	40.0	35.0	38.0	2,942	2,345	2,622
Massachusetts	38	40	41	41.1	41.0	41.0	1,582	1,640	1,681
Rhode Island	9	8	8	39.7	38.0	39.0	358	304	312
Connecticut	52	47	47	38.5	40.0	42.0	1,983	1,880	1,974
New York	654	683	676	34.2	31.0	40.0	22,403	21,173	27,040
New Jersey	192	183	181	38.4	38.0	41.0	7,363	6,954	7,421
Pennsylvania	1,331	1,322	1,282	40.2	38.0	41.5	53,662	50,236	53,203
Ohio	3,603	3,220	3,252	38.8	38.0	49.5	139,956	122,360	160,974
Indiana	4,436	3,934	3,934	36.2	37.0	45.0	160,373	145,558	177,030
Illinois	8,887	7,645	7,645	36.2	43.0	52.5	321,945	328,735	401,362
Michigan	1,537	1,564	1,501	30.9	32.5	32.0	47,468	50,830	48,032
Wisconsin	2,299	2,272	2,250	32.4	41.5	40.5	74,644	94,288	91,125
Minnesota	4,693	4,366	4,410	30.6	39.5	44.5	143,410	172,457	196,245
Iowa	10,736	9,024	9,114	37.2	52.5	51.0	399,184	473,760	464,814
Missouri	5,204	4,067	3,904	20.6	30.5	29.0	107,141	124,044	113,216
North Dakota	1,172	1,052	1,073	14.0	24.0	23.0	16,368	25,248	24,679
South Dakota	3,645	2,787	2,703	11.2	18.0	18.5	41,768	50,166	50,006
Nebraska	8,528	6,211	6,708	14.6	17.0	23.5	133,822	105,587	157,638
Kansas	4,609	2,647	2,488	12.2	16.0	23.0	59,550	42,352	57,224
Delaware	143	141	136	27.7	27.0	30.0	3,964	3,807	3,990
Maryland	510	495	446	31.6	33.0	34.0	16,173	16,335	15,164
Virginia	1,462	1,348	1,267	22.2	27.0	26.0	32,418	36,396	32,942
West Virginia	504	427	397	24.7	28.0	31.0	12,616	11,956	12,307
North Carolina	2,376	2,441	2,368	18.3	19.5	22.0	43,507	47,600	52,096
South Carolina	1,694	1,758	1,653	13.5	13.5	13.5	22,831	23,733	22,316
Georgia	4,198	4,259	4,000	9.7	11.0	10.5	40,904	46,849	42,000
Florida	759	732	732	8.9	11.0	9.0	6,775	8,052	6,588
Kentucky	2,879	2,610	2,610	22.4	24.0	28.0	64,557	62,640	73,080
Tennessee	2,853	2,730	2,730	21.2	25.0	25.5	60,618	68,250	69,615
Alabama	3,288	3,554	3,305	12.4	12.0	15.5	40,973	42,648	51,228
Mississippi	2,660	3,077	3,015	14.5	14.0	17.0	38,537	43,078	51,255
Arkansas	2,122	2,192	2,148	14.4	21.0	19.0	30,567	46,032	40,812
Louisiana	1,479	1,596	1,484	14.4	15.5	15.0	21,360	24,738	22,260
Oklahoma	2,362	1,802	1,783	13.1	21.5	17.5	31,131	38,743	31,202
Texas	4,931	4,782	4,925	15.4	19.5	15.0	75,964	93,249	73,875
Montana	137	168	178	9.9	17.0	20.0	1,396	2,856	3,560
Idaho	35	46	53	35.2	45.0	45.0	1,239	2,070	2,385
Wyoming	203	131	152	10.0	11.0	15.0	2,068	1,441	2,280
Colorado	1,305	865	951	10.0	11.3	15.8	13,419	9,774	15,026
New Mexico	200	176	195	13.3	13.5	17.0	2,677	2,376	3,315
Arizona	32	36	41	15.2	10.5	11.0	482	378	451
Utah	20	27	28	24.0	28.0	29.0	469	756	812
Nevada	2	4	4	26.7	31.0	28.0	56	124	112
Washington	33	35	35	34.4	37.0	42.0	1,141	1,295	1,470
Oregon	62	60	59	30.2	30.5	33.0	1,872	1,830	1,947
California	71	75	79	32.8	32.5	32.0	2,317	2,438	2,528
United States	98,049	86,738	86,089	23.5	28.4	31.0	2,307,452	2,460,624	2,672,541

This table covers corn for all purposes, including hogged and siloed corn, and that cut and fed without removing the ears, as well as that husked and snapped for grain. The yield for grain, with an allowance for varying yields of corn for other purposes, is applied to the total acreage to obtain an equivalent production expressed in terms of grain.

UNITED STATES RICE CROP AND ACREAGE

Department of Agriculture estimates of the United States rice acreage, yield per acre and total production, by states and calendar years:

State—	000's omitted Acreage, acres Average 1930-39	1940	1941	Yield per acre, bus Average 1930-39	1940	1941	000's omitted Production, bus Average 1930-39	1940	1941
Arkansas	165	191	214	50.5	50.2	53.0	8,368	9,588	11,342
Louisiana	456	469	538	40.7	40.0	37.0	18,546	18,760	19,906
Texas	204	291	340	51.7	57.2	40.0	10,585	16,645	13,600
California	118	118	153	69.6	80.0	60.0	8,176	9,440	9,180
United States	942	1,069	1,245	48.4	50.9	43.4	45,673	54,433	54,028

UNITED STATES BARLEY CROP AND ACREAGE

Department of Agriculture estimates of the United States barley acreage, yield per acre, and total production, by states and calendar years:

State—	000's omitted Acreage, acres—Average 1930-39	1940	1941	Yield per acre, bus—Average 1930-39	1940	1941	000's omitted Production, bus—Average 1930-39	1940	1941
Maine	4	4	5	29.2	29.0	27.0	120	116	135
Vermont	4	6	5	27.2	29.0	27.0	109	174	135
New York	156	131	117	24.6	28.0	25.0	3,854	3,668	2,925
New Jersey	2	7	8	28.0	26.0	27.0	43	182	216
Pennsylvania	70	145	139	26.8	26.0	26.0	1,889	3,770	3,614
Ohio	50	30	40	23.4	28.0	28.5	1,194	840	1,140
Indiana	31	40	70	20.2	29.0	30.0	634	1,160	2,100
Illinois	206	117	135	24.7	36.5	31.5	5,195	4,270	4,252
Michigan	214	192	207	23.4	35.0	31.5	4,959	6,720	6,520
Wisconsin	795	647	544	27.2	37.5	31.0	21,516	24,262	16,864
Minnesota	1,963	1,944	1,652	22.0	30.0	27.0	43,822	58,320	44,604
Iowa	496	429	257	23.7	30.0	27.0	11,826	12,870	6,939
Missouri	65	190	189	18.3	24.0	20.0	1,222	4,560	3,780
North Dakota	1,613	1,747	1,747	14.4	16.0	25.0	24,493	27,952	43,675
South Dakota	1,352	1,619	1,716	15.3	17.0	22.5	23,543	27,523	38,610
Nebraska	744	1,321	1,915	16.5	16.0	25.5	12,760	21,136	48,832
Kansas	399	1,136	1,306	13.2	16.0	20.0	5,478	18,176	26,120
Delaware	..	5	6	...	29.0	30.0	...	145	180
Maryland	37	73	78	29.6	27.5	26.0	1,091	2,008	2,028
Virginia	45	80	75	25.3	27.0	24.0	1,132	2,160	1,800
West Virginia	6	12	11	24.8	23.5	23.5	137	282	258
North Carolina	14	15	24	18.3	24.0	24.0	253	360	576
Kentucky	22	60	90	22.3	25.0	26.0	510	1,500	2,340
Tennessee	31	66	80	17.5	22.0	20.0	546	1,452	1,600
Arkansas	..	11	11	...	16.0	15.0	...	176	165
Oklahoma	132	430	512	15.2	17.0	18.0	2,091	7,310	9,216
Texas	147	271	325	15.6	16.0	30.0	2,366	4,336	9,750
Montana	136	187	202	19.8	22.5	28.0	2,717	4,208	5,656
Idaho	128	250	300	34.2	33.0	38.0	4,375	8,250	11,400
Wyoming	70	84	89	21.6	25.5	30.5	1,476	2,142	2,714
Colorado	407	500	610	19.1	20.2	25.2	7,797	10,100	15,372
New Mexico	8	15	21	20.9	23.0	29.0	163	345	609
Arizona	24	35	44	30.9	32.0	32.0	755	1,120	1,408
Utah	48	107	118	37.5	41.0	45.0	1,818	4,387	5,310
Nevada	8	16	17	37.3	35.0	39.0	292	560	663
Washington	61	135	146	31.8	29.0	37.0	1,941	3,915	5,402
Oregon	107	213	196	28.9	25.0	32.0	3,087	5,325	6,272
California	1,116	1,226	1,042	26.4	28.0	24.5	29,764	34,328	25,529
United States	10,707	13,496	14,049	20.6	23.0	25.5	224,970	310,108	358,709

UNITED STATES OATS CROP AND ACREAGE

Department of Agriculture estimates of the United States oats acreage, yield per acre, and total production, by states and calendar years:

State—	000's omitted Acreage, acres—Average 1930-39	1940	1941	Yield per acre, bus—Average 1930-39	1940	1941	000's omitted Production, bus—Average 1930-39	1940	1941
Maine	117	104	108	26.8	40.0	37.0	4,320	4,160	3,996
New Hampshire	8	6	6	37.2	43.0	40.0	282	258	240
Vermont	60	49	47	31.3	34.0	32.0	1,866	1,666	1,504
Massachusetts	6	5	6	33.0	34.0	34.0	182	170	204
Rhode Island	2	1	1	31.7	29.0	32.0	63	29	32
Connecticut	7	4	4	28.8	34.0	36.0	190	136	144
New York	826	838	855	28.8	36.5	30.0	23,817	30,587	25,650
New Jersey	46	39	42	29.6	33.0	34.0	1,378	1,287	1,428
Pennsylvania	928	842	876	28.4	35.0	34.5	26,405	29,470	30,222
Ohio	1,389	1,009	1,181	30.7	44.0	43.5	42,814	44,396	51,374
Indiana	1,560	1,100	1,320	26.0	45.0	41.0	41,123	49,500	54,120
Illinois	3,758	3,090	3,584	30.2	48.0	43.0	115,090	148,320	154,112
Michigan	1,308	1,350	1,350	29.8	45.5	34.0	39,026	61,425	45,900
Wisconsin	2,446	2,271	2,293	30.8	43.0	33.0	75,456	97,653	75,669
Minnesota	4,239	4,254	4,297	31.2	42.5	27.0	133,528	180,795	116,019
Iowa	5,825	5,178	5,540	31.4	38.5	32.0	185,271	199,353	177,280
Missouri	1,696	1,730	2,076	21.5	28.5	25.5	36,989	49,305	52,938
North Dakota	1,438	1,659	1,775	18.6	21.0	33.0	28,342	34,839	58,575
South Dakota	1,520	1,938	2,112	21.3	27.5	26.0	37,372	53,295	54,912
Nebraska	1,955	1,426	1,840	20.3	24.0	29.5	42,750	34,224	54,280
Kansas	1,489	1,557	1,619	21.8	30.0	22.5	32,525	46,710	36,428
Delaware	3	2	3	30.2	28.0	31.0	94	56	93
Maryland	47	29	32	28.4	32.0	32.0	1,325	928	1,024
Virginia	107	97	105	19.6	27.0	25.0	2,116	2,619	2,625
West Virginia	99	70	74	19.6	23.0	24.0	1,931	1,610	1,776
North Carolina	227	235	252	19.6	25.0	25.0	4,460	5,875	6,300
South Carolina	431	530	550	21.4	21.5	22.0	9,238	11,395	12,100
Georgia	372	458	513	19.2	19.0	20.5	7,173	8,702	10,516
Florida	8	11	11	14.7	14.0	15.5	115	154	170
Kentucky	106	70	89	16.3	21.0	21.0	1,733	1,470	1,869
Tennessee	98	78	108	16.2	22.0	23.0	1,603	1,716	2,484
Alabama	112	130	176	19.2	20.0	25.0	2,219	2,600	4,400
Mississippi	49	217	282	23.5	32.0	36.0	1,235	6,944	10,152
Arkansas	142	234	260	19.4	26.5	23.5	2,784	6,201	6,110
Louisiana	36	78	91	25.0	34.5	30.5	942	2,691	2,776
Oklahoma	1,288	1,537	1,400	20.1	23.0	18.5	26,083	35,351	25,900
Texas	1,444	1,651	1,519	23.8	27.0	25.0	34,980	44,577	37,975
Montana	253	371	404	23.0	28.5	36.0	5,907	10,574	14,544
Idaho	138	164	167	35.9	36.0	40.0	4,967	5,904	6,680
Wyoming	107	102	125	24.4	29.0	33.0	2,587	2,958	4,125
Colorado	154	151	177	27.8	27.6	33.1	4,292	4,168	5,859
New Mexico	25	32	34	23.4	24.0	27.0	568	768	918
Arizona	11	7	8	26.7	30.5	32.0	293	214	256
Utah	34	39	43	35.8	39.0	44.0	1,234	1,521	1,892
Nevada	4	6	5	35.3	40.0	41.0	130	240	205
Washington	170	178	169	48.2	39.0	45.0	8,208	6,942	7,605
Oregon	285	305	306	31.3	25.0	29.5	8,944	7,625	9,027
California	115	161	137	27.3	29.0	27.0	3,192	4,669	3,699
United States	36,487	35,393	37,972	27.3	35.2	31.0	1,007,141	1,246,050	1,176,107

UNITED STATES SOYBEANS HARVESTED FOR BEANS

Department of Agriculture estimates of the acreage, yield per acre and quantity of soybeans gathered for beans (acreage and production in thousands):

State—	Acreage harvested*—Average 1930-39	1940	1941	Yield per acre, bus—Average 1930-39	1940	1941	Production, bus—Average 1930-39	1940	1941
New York	†2	14	12	†14.8	13.0	15.0	†32	182	180
New Jersey	..	6	7	...	14.0	13.0	...	84	91
Pennsylvania	†5	14	15	†16.2	16.0	15.0	†80	224	225
Ohio	137	570	674	18.0	15.5	19.5	2,694	8,835	13,143
Indiana	304	723	856	16.6	13.0	17.0	5,317	9,399	14,552
Illinois	944	1,995	2,285	19.1	17.5	21.5	19,082	34,912	49,128
Michigan	17	72	96	13.0	15.0	14.0	250	1,080	1,344
Wisconsin	5	25	37	12.5	17.5	15.0	65	438	555
Minnesota	..	53	80	...	16.0	15.0	...	848	1,200
Iowa	214	709	949	16.8	20.0	17.5	3,812	14,180	16,608
Missouri	95	109	187	8.2	13.0	11.5	770	1,417	2,150
Nebraska	..	4	20	...	13.0	11.0	...	52	220
Kansas	8	26	47	7.4	13.0	12.0	60	338	564
Delaware	19	25	30	13.6	12.0	11.5	260	300	345
Maryland	7	19	20	12.6	13.5	12.0	92	256	240
Virginia	21	49	51	12.2	15.5	12.5	260	760	638
West Virginia	2	1	2	11.6	13.0	13.0	18	13	26
North Carolina	115	160	171	12.4	12.0	10.0	1,437	1,920	1,710
South Carolina	10	10	12	6.4	6.5	7.5	65	65	90
Georgia	10	13	13	5.8	7.0	6.8	59	91	88
Kentucky	10	31	43	10.4	12.0	13.5	107	372	580
Tennessee	23	19	20	7.3	8.5	9.0	171	162	180
Alabama	13	10	19	5.7	5.5	6.5	78	55	124
Mississippi	39	39	71	8.2	10.0	10.5	320	390	746
Arkansas	30	63	116	8.5	12.0	15.0	264	756	1,740
Louisiana	16	15	17	8.2	13.5	11.5	136	202	196
Oklahoma	4	2	2	8.4	7.5	8.0	30	15	16
Texas	†3	3	3	†7.2	9.5	11.0	†18	28	33
United States	2,052	4,779	5,855	16.1	16.2	18.2	35,506	77,374	106,712

*Equivalent solid acreage. (Acreage grown alone, with an allowance for acreage grown with other crops.) †Short-time average.

UNITED STATES RYE CROP AND ACREAGE

Department of Agriculture estimates of the United States rye acreage, yield per acre, and total production, by states and calendar years:

State—	000's omitted Acreage, acres—Average 1930-39	1940	1941	Yield per acre, bus—Average 1930-39	1940	1941	000's omitted Production, bus—Average 1930-39	1940	1941
New York	22	23	17	15.8	18.0	17.0	352	414	289
New Jersey	23	17	16	17.3	16.5	16.5	403	280	264
Pennsylvania	103	60	57	14.1	15.0	14.0	1,444	900	798
Ohio	68	72	72	14.0	18.0	18.5	963	1,296	1,332
Indiana	125	124	126	11.8	15.0	15.5	1,473	1,860	1,953
Illinois	89	59	56	12.1	14.5	13.0	1,099	856	728
Michigan	151	80	58	12.1	14.5	13.5	1,838	1,160	783
Wisconsin	249	182	142	10.9	14.0	11.5	2,792	2,548	1,633
Minnesota	430	331	295	15.0	17.0	12.0	6,605	5,627	3,540
Iowa	81	37	20	14.5	18.5	13.5	1,262	684	270
Missouri	34	31	34	9.4	13.5	12.5	314	403	425
North Dakota	754	779	872	9.2	13.0	15.5	7,575	10,127	13,516
South Dakota	386	527	653	10.5	11.5	11.5	4,758	6,060	7,510
Nebraska	328	288	272	8.9	9.5	11.5	3,090	2,736	4,078
Kansas	43	64	89	10.5	10.5	11.0	458	672	979
Delaware	7	12	9	12.4	13.0	13.5	88	156	122
Maryland	19	16	15	13.0	12.5	14.0	249	200	210
Virginia	52	47	39	11.6	12.0	11.5	615	564	448
West Virginia	11	5	4	11.7	11.0	11.0	130	55	44
North Carolina	65	51	49	7.5	10.0	10.0	489	510	490
South Carolina	10	19	27	8.4	9.0	8.5	80	171	230
Georgia	18	24	25	6.0	7.5	7.5	111	180	188
Kentucky	19	12	17	10.9	11.5	14.0	211	138	238
Tennessee	31	43	45	6.9	9.0	10.0	218	387	450
Oklahoma	27	102	136	7.9	9.5	9.0	213	969	1,224
Texas	3	18	17	10.0	8.5	13.0	32	153	221
Montana	35	44	45	9.4	11.0	12.0	344	484	540
Idaho	6	6	7	10.7	14.0	15.5	62	84	108
Wyoming	24	15	23	6.5	7.0	13.0	155	105	299
Colorado	40	43	73	7.2	8.0	11.0	300	344	803
Utah	3	3	4	7.6	8.5	15.0	20	26	60
Washington	21	21	30	8.3	12.0	15.0	173	252	450
Oregon	36	45	44	12.5	13.5	14.5	460	608	638
California	8	10	10	12.6	14.0	13.0	96	140	130
United States	3,320	3,210	3,498	11.2	12.8	12.9	38,472	41,149	45,191

United States Rye Acreage Seeded

Department of Agriculture estimates of the acreage sown to rye in the autumn of 1941, compared with the revised estimate of the acreage in previous years (acres, 000's omitted), and of the condition of the crop on that date:

State—	Av'ge, 1930–39	*Acreage seeded autumn of 1940	1941	Condition (pct.) Dec. 1 Av'ge, 1930–39	1940	1941
New York	61	63	63	89	90	91
N. Jersey	90	94	93	89	86	87
Pennsylvania	128	81	78	85	85	88
Ohio	144	125	134	86	90	94
Indiana	228	246	271	86	90	91
Illinois	182	119	115	88	85	87
Michigan	212	111	120	85	88	92
Wisconsin	355	199	181	88	89	93
Minnesota	537	399	339	81	87	88
Iowa	155	67	67	85	87	93
Missouri	122	133	140	80	75	84
N. Dakota	1,197	1,003	1,063	61	81	85
S. Dakota	833	904	913	66	73	89
Nebraska	529	755	680	70	83	93
Kansas	117	198	198	76	89	89
Delaware	14	20	20	91	91	83
Maryland	42	52	55	85	88	78
Virginia	124	130	143	81	86	65
West Virginia	18	12	13	80	85	83
N. Carolina	170	175	206	82	86	77
S. Carolina	31	77	96	72	78	75
Georgia	60	73	73	78	76	76
Kentucky	120	135	148	81	83	90
Tennessee	140	165	168	80	82	82
Oklahoma	87	319	383	70	81	82
Texas	9	42	42	69	69	88
Montana	73	65	68	76	90	89
Idaho	14	21	19	83	97	94
Wyoming	45	40	38	71	93	94
Colorado	82	146	175	65	90	94
Utah	4	7	8	78	83	92
Washington	50	50	45	75	99	96
Oregon	115	138	116	84	97	93
California	13	18	18	..	88	96
U. S.	6,101	6,182	6,289	75	83	87

*Estimates of seeded acreage relate to the total acreage of rye sown for all purposes, including an allowance for spring sown rye.

United States Winter Wheat Acreage Seeded

Department of Agriculture estimates of the acreage sown to winter wheat in the autumn of 1941, compared with the revised estimate of the previous years (acres, 000's omitted), and of the condition of the crop on Dec. 1:

State—	Acreage seeded autumn of Average, 1930-39	1940	1941	Condition (pct.) Dec. 1 Av'ge, 1930 –39	1940	1941
New York	272	301	280	89	85	92
N. Jersey	63	72	69	89	86	87
Pa.	987	883	795	85	86	88
Ohio	2,118	2,018	1,776	85	90	94
Indiana	1,786	1,483	1,275	83	89	89
Illinois	2,087	1,838	1,415	85	83	72
Michigan	835	753	685	85	88	92
Wisconsin	41	39	37	88	89	95
Minnesota	198	209	190	83	87	89
Iowa	414	330	238	82	84	91
Missouri	2,048	1,856	1,336	80	72	66
S. Dakota	235	214	199	66	66	91
Nebraska	3,532	3,368	2,930	70	81	93
Kansas	14,064	13,064	10,712	68	88	88
Delaware	84	68	61	90	86	84
Maryland	433	367	323	84	85	77
Virginia	612	560	498	79	85	64
W. Va.	151	130	120	80	84	83
N. Carolina	477	506	531	81	82	78
S. Carolina	163	253	293	73	73	78
Georgia	170	210	248	76	73	77
Kentucky	456	441	432	81	83	90
Tenn.	427	387	375	79	82	82
Alabama	7	8	10	78	83	82
Arkansas	74	35	36	77	80	82
Okla.	4,876	5,030	4,276	67	77	80
Texas	4,743	3,917	3,604	66	66	85
Montana	1,002	1,380	1,311	78	91	90
Idaho	691	678	590	82	94	94
Wyoming	206	160	160	70	92	93
Colorado	1,234	1,321	1,162	64	90	94
N. Mexico	380	335	302	72	50	89
Arizona	42	32	28	89	99	92
Utah	196	206	175	79	90	95
Nevada	3	5	4	91	95	100
Wash.	1,233	1,661	1,512	75	96	96
Oregon	737	688	619	79	97	96
Calif.	799	857	711	79	81	77
U. S.	47,875	45,663	39,318	74	84	87

UNITED STATES WHEAT ACREAGE ABANDONED

The following table gives estimates of acreage seeded and harvested for winter, durum and other spring wheat, together with the percentage of acreage abandoned, as reported by the Department of Agriculture (000's omitted in acreage figures):

Year of harvest—	Winter wheat—Acreage—seeded	harvested	% abandoned	Other spring wheat—Acreage—seeded	harvested	% abandoned	Durum wheat—Acreage—seeded	harvested	% abandoned
1942	39,318	.....	...	.....	.....	...	.....	.....	...
1941	45,663	39,547	13.4	16,741	16,284	2.7	2,597	2,546	2.0
1940	43,820	35,789	18.3	18,248	17,191	5.8	3,370	3,029	10.1
1939	46,464	38,078	18.0	17,052	15,404	9.6	3,211	3,058	4.7
1938	56,539	49,786	11.9	19,139	16,514	13.7	3,887	3,569	8.1
1937	57,612	46,978	18.6	20,524	17,514	27.1	3,226	2,756	14.8
1936	49,765	37,687	24.2	20,404	9,638	53.1	3,555	1,538	56.6
1935	47,064	33,402	29.2	19,682	15,565	20.9	2,461	2,262	8.1
1934	44,585	34,638	22.3	17,018	7,886	53.7	1,959	876	55.3
1933	44,445	30,272	31.9	20,928	16,862	19.4	3,112	2,304	26.0
1932	43,371	36,056	16.9	18,315	17,799	2.8	4,227	3,984	5.7
1931	45,647	43,448	4.8	16,348	11,269	31.1	4,003	2,964	26.0
1930	45,032	41,069	8.8	17,342	16,844	2.9	4,776	4,701	1.6
1929	43,967	41,194	6.3	17,103	16,567	3.1	5,770	5,571	3.4
1928	48,431	36,853	23.9	15,837	15,569	1.7	6,884	6,804	1.2

UNITED STATES WHEAT PRODUCTION BY CLASSES

The following table, compiled by the Department of Agriculture, shows wheat production in the United States by classes, in thousand bushels:

Year	Winter—Hard red	Soft red	Spring—Hard red	Durum	White—Winter	Spring	Total white	Total
1941	394,336	211,931	205,955	42,942	65,026	25,747	90,773	945,937
1940	328,463	206,642	157,282	34,390	53,697	31,900	85,597	812,374
1939	309,300	206,413	120,674	35,083	54,028	25,937	79,965	751,435
1938	389,224	236,071	157,202	42,266	62,838	44,101	106,939	931,702
1937	373,371	257,838	101,393	28,929	54,615	59,530	114,145	875,676
1936	259,775	207,410	50,742	8,836	52,689	47,314	100,003	626,766
1935	203,232	204,256	107,975	24,759	57,831	28,291	86,122	626,344
1934	207,860	188,602	53,279	6,891	41,501	28,260	69,761	526,393
1933	176,997	162,318	106,469	17,816	37,208	50,880	88,088	551,683
1932	280,450	159,214	189,939	42,252	52,131	22,941	85,072	756,927
1931	514,035	262,006	72,439	22,099	49,355	21,740	71,095	941,674
1930	403,609	179,692	157,378	59,522	50,304	35,965	86,269	886,470
1929	371,076	164,400	145,621	57,117	50,763	34,240	85,003	822,217
1928	394,110	127,393	202,803	99,008	57,563	33,496	91,059	914,373

United States Hay Crop

Department of Agriculture estimates of the hay crop of the United States, including both tame and wild hay, in tons (000's omitted):

State—	Acreage 1940	Acreage 1941	Production 1940	Production 1941
Maine	858	842	770	650
N. Hampshire	359	362	408	360
Vermont	923	911	1,174	968
Mass.	338	344	491	450
Rhode Island	33	34	47	41
Connecticut	277	274	400	403
New York	3,860	3,907	5,733	4,230
New Jersey	240	241	393	362
Pennsylvania	2,376	2,341	3,427	2,882
Ohio	2,604	2,432	3,847	3,329
Indiana	2,206	1,882	2,812	2,435
Illinois	3,267	2,726	4,262	3,643
Michigan	2,702	2,628	4,050	3,308
Wisconsin	3,955	4,040	6,977	6,907
Minnesota	4,466	4,579	6,112	6,942
Iowa	4,280	3,792	6,498	5,721
Missouri	3,389	3,342	3,720	3,554
North Dakota	2,693	2,736	2,501	3,198
South Dakota	2,529	2,887	1,731	2,090
Nebraska	3,273	3,789	2,406	3,785
Kansas	1,148	1,410	1,619	2,221
Delaware	71	70	92	91
Maryland	414	422	553	475
Virginia	1,290	1,250	1,504	1,264
W. Virginia	783	783	864	818
N. Carolina	1,121	1,172	1,044	1,091
S. Carolina	637	642	438	477
Georgia	1,349	1,360	803	790
Florida	127	127	81	75
Kentucky	1,526	1,526	1,720	1,815
Tennessee	1,919	1,974	2,006	2,182
Alabama	977	1,038	705	822
Mississippi	950	1,043	1,181	1,280
Arkansas	1,411	1,495	1,627	1,648
Louisiana	341	369	439	462
Oklahoma	1,236	1,228	1,555	1,716
Texas	1,440	1,337	1,667	1,551
Montana	1,788	1,741	2,160	2,318
Idaho	1,132	1,136	2,415	2,391
Wyoming	956	1,013	1,088	1,342
Colorado	1,351	1,433	1,922	2,310
N. Mexico	218	221	448	482
Arizona	230	254	481	603
Utah	563	577	1,112	1,229
Nevada	400	406	623	664
Washington	919	952	1,692	1,969
Oregon	1,087	1,046	1,876	1,917
California	1,844	1,829	5,067	4,846
U. States	71,806	71,893	94,541	94,107

UNITED STATES WHEAT ACREAGE HARVESTED IN PRINCIPAL PRODUCING STATES

The following table shows the acreage of all wheat harvested in the principal producing states, as reported by the Department of Agriculture, in thousand acres:

State—	1941	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931	1930	1929	1928
Pennsylvania	867	884	926	1,050	1,073	1,033	1,004	946	937	920	930	997	987	1,002
Ohio	1,959	1,959	1,906	2,381	2,432	2,177	2,132	1,994	2,089	1,748	1,861	1,661	1,564	856
Indiana	1,476	1,433	1,534	1,803	2,171	1,775	1,906	1,845	1,577	1,470	1,729	1,587	1,568	961
Illinois	1,776	1,745	1,980	2,259	2,621	2,082	2,074	2,080	1,874	1,669	2,101	2,025	2,093	1,462
Michigan	755	779	739	913	1,011	823	874	855	885	734	734	724	790	785
Minnesota	1,501	1,622	1,595	2,616	2,160	1,736	1,574	1,322	1,539	1,462	1,224	1,387	1,421	1,544
Iowa	204	313	392	584	817	407	401	298	251	273	357	435	426	463
Missouri	1,336	1,713	1,845	2,432	3,198	2,095	2,054	1,643	1,362	1,404	1,596	1,336	1,534	1,521
North Dakota	8,234	8,025	7,653	8,512	7,018	3,699	7,823	3,430	10,098	10,639	6,295	9,896	10,440	10,832
South Dakota	2,864	2,693	2,193	3,108	2,738	840	3,153	158	1,150	3,854	2,941	3,682	3,583	3,648
Nebraska	2,352	2,630	3,199	4,691	3,601	3,338	3,070	2,251	2,437	2,277	3,420	3,974	3,700	3,757
Kansas	11,799	8,739	9,713	14,497	13,172	10,464	6,888	8,610	7,361	10,365	13,623	13,132	12,550	10,639
Maryland	345	363	377	471	476	449	428	408	413	393	418	486	506	496
Virginia	511	527	530	609	648	629	629	605	567	585	609	591	657	608
Oklahoma	4,543	4,020	4,317	5,607	4,610	3,440	3,308	3,543	3,093	3,966	4,407	3,935	4,576	4,613
Texas	2,614	2,904	2,765	3,894	3,932	2,458	1,639	3,094	2,105	3,509	4,386	3,457	3,042	2,393
Montana	3,703	3,917	3,440	4,288	2,624	2,239	3,434	2,481	3,512	4,021	2,182	4,217	4,419	4,395
Idaho	953	980	870	1,159	1,153	1,112	978	885	930	1,139	964	1,221	1,307	1,310
Colorado	1,368	1,028	1,140	1,315	1,136	853	553	704	583	704	1,423	1,659	1,529	1,481
Washington	2,098	2,136	1,901	2,205	2,317	2,164	1,998	1,934	2,163	2,308	2,315	2,338	2,375	2,223
Oregon	815	839	756	1,068	992	1,000	878	835	903	991	945	1,027	1,075	1,019
California	752	783	658	749	832	858	766	615	696	595	518	556	633	730

United States Winter Wheat Sowing

Department of Agriculture estimates of the normal period of sowing winter wheat:

WINTER WHEAT SOWING

State—	Beginning	General	Ending
Montana	Aug. 1	Aug. 20	Sept. 10
Washington	Aug. 20	Sept. 12	Oct. 1
Pennsylvania	Sept. 2	Sept. 14	Oct. 4
Michigan	Sept. 3	Sept. 15	Sept. 26
Iowa	Sept. 4	Sept. 18	Sept. 27
New York	Sept. 4	Sept. 14	Oct. 2
Wisconsin	Sept. 5	Sept. 17	Sept. 25
Nebraska	Sept. 5	Sept. 21	Oct. 6
Indiana	Sept. 8	Sept. 23	Oct. 7
Missouri	Sept. 9	Sept. 24	Oct. 10
Oregon	Sept. 10	Oct. 1	Oct. 15
Ohio	Sept. 11	Sept. 26	Oct. 10
Kansas	Sept. 11	Sept. 24	Oct. 24
Illinois	Sept. 12	Sept. 24	Oct. 8
Oklahoma	Sept. 13	Sept. 28	Oct. 29
West Virginia	Sept. 15	Oct. 1	Oct. 15
Maryland	Sept. 18	Oct. 5	Oct. 20
Kentucky	Sept. 19	Oct. 3	Oct. 25
California	Sept. 20	Nov. 1	Dec. 15
Virginia	Sept. 20	Oct. 10	Oct. 21
Tennessee	Sept. 22	Oct. 11	Nov. 6
Arkansas	Sept. 22	Oct. 20	Nov. 14
Texas	Sept. 30	Oct. 10	Nov. 15
South Carolina	Oct. 13	Oct. 26	Dec. 8
North Carolina	Oct. 14	Nov. 5	Nov. 15
Georgia	Oct. 14	Aug. 27	Nov. 28

United States Winter Wheat Condition

Condition of winter wheat as reported by the Department of Agriculture on the dates specified, in terms of percentage of normal:

Year—	Dec. 1 previous year	Apr. 1	May 1	June 1	When harvested
1942	87.0	...	...	...	...
1941	84.0	79.0	86.0	82.0	82.0
1940	85.0	64.0	75.0	73.0	72.0
1939	72.0	78.0	79.0	68.0	69.0
1938	76.0	82.0	85.0	81.0	75.0
1937	75.8	72.8	77.4	71.5	71.0
1936	78.2	68.5	67.0	66.7	66.3
1935	77.8	69.8	75.3	74.2	73.0
1934	74.3	74.3	70.9	55.3	57.2
1933	68.9	59.4	66.7	64.0	57.8
1932	79.4	75.8	75.1	64.7	64.7
1931	86.3	88.8	90.8	84.3	82.3
1930	86.0	77.4	76.7	71.7	73.8
1929	84.4	82.7	83.6	79.6	86.7
1928	86.0	68.8	74.9	73.6	88.7
1927	81.8	84.5	85.6	72.2	75.0
1926	82.7	84.1	84.0	76.5	77.6
1925	81.0	68.7	77.0	66.5	85.2
1924	88.0	83.0	84.8	74.0	77.9
1923	79.5	75.2	80.1	76.3	76.8
1922	76.0	78.4	83.5	81.9	77.0
1921	88.5	91.8	88.0	77.9	77.2
1920	85.2	75.6	79.1	78.2	79.7
1919	98.6	99.8	100.5	94.9	84.0
1918	79.3	78.6	86.4	83.8	79.5
1917	85.7	63.4	73.2	70.9	75.9
1916	87.7	78.3	82.4	73.2	75.7
1915	88.3	88.8	92.9	85.8	84.4

United States Spring Wheat Condition

Condition of spring wheat as reported by the Department of Agriculture, on the dates specified, in terms of percentage of normal:

Year—	June 1	July 1	Aug. 1	Sept. 1
1941	87.0	90.0	66.0	87.0
1940	88.0	74.0	66.0	71.0
1939	71.0	73.0	65.0	68.0
1938	87.0	77.0	69.0	62.0
1937	68.7	71.5	55.8	54.0
1936	66.9	45.7	32.8	31.2
1935	85.2	85.1	49.4	44.4
1934	41.3	38.4	30.4	32.1
1933	84.9	52.1	44.6	50.2
1932	84.5	84.2	70.6	66.9
1931	67.9	53.4	39.5	36.5
1930	86.0	74.7	60.7	63.1
1929	84.8	74.4	56.2	58.4
1928	79.0	71.7	81.8	82.0
1927	86.8	89.7	86.4	82.7
1926	78.5	64.8	60.2	58.4
1925	87.1	88.1	73.9	75.0
1924	82.3	81.9	79.7	82.3
1923	90.2	82.4	69.6	65.1
1922	90.7	83.7	80.4	80.1
1921	93.4	80.8	66.6	62.5
1920	89.1	88.0	73.4	64.1
1919	91.2	80.9	53.9	48.5
1918	95.2	86.1	79.6	79.8
1917	91.6	83.6	68.7	71.2
1916	88.2	89.0	63.4	48.6
1915	94.9	93.3	93.4	94.6
1914	95.5	92.1	75.5	68.0
1913	93.5	73.8	74.1	75.3
1912	95.8	89.3	90.4	90.8

UNITED STATES COST OF RAISING WHEAT—1940

Estimates by the Department of Agriculture of the cost of producing wheat in different regions of the United States on the 1939 crop, in dollars per acre;

	Prepare and plant	Harvest	Haul to market	Fertilizer	Seed	Miscellaneous	Land rent	Total	Credit for straw	Net cost per acre excluding rent	Net cost per acre including rent	Net cost per bu excluding rent	Net cost per bu including rent
Eastern—North	4.26	4.29	1.02	3.64	1.79	3.22	4.46	22.68	2.15	16.07	20.53	.85	1.08
South	2.82	3.16	.82	2.19	1.32	2.50	3.29	16.10	1.13	11.68	14.97	.90	1.15
Ohio, Ind., Mich.	3.72	3.90	.88	3.14	1.63	2.59	4.71	20.57	1.05	14.81	19.52	.70	.93
Wis., Ill., Iowa and Mo.	3.06	3.30	.94	1.10	1.23	2.42	4.29	16.37	.59	11.49	15.78	.55	.76
Neb., Kansas, Colo., Texas, Okla.	2.09	2.27	.53	.11	.87	2.85	2.98	11.70	.27	8.45	11.43	.64	.86
Minn., N. D., S. D., Mont, Wyo.	2.24	2.57	.67	.17	1.16	1.98	1.97	10.76	.26	8.53	10.50	.67	.83
Western	3.32	3.20	.98	.18	1.16	3.42	4.52	16.78	.38	11.88	16.40	.59	.81
United States	2.58	2.79	.71	.68	1.14	2.58	3.12	13.60	.48	10.00	13.12	.65	.86

UNITED STATES—WHEAT PRODUCTION IN PRINCIPAL PRODUCING STATES

The following table shows production of all wheat in the principal producing states for a series of years, as estimated by the Department of Agriculture, in million bushels:

State—	1941	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931	1930	1929	1928
Pennsylvania	16.9	17.7	19.4	22.0	23.5	19.6	21.0	15.4	16.8	13.9	20.4	21.9	17.5	14.5
Ohio	49.0	42.1	37.1	46.4	46.1	40.3	46.9	36.5	37.6	34.9	53.8	29.1	30.5	9.9
Indiana	34.7	27.9	27.6	28.8	34.7	31.0	29.5	31.9	23.6	24.2	44.8	28.6	25.9	10.1
Illinois	35.5	39.3	41.5	41.8	45.7	36.4	30.1	36.5	30.7	25.9	48.9	36.9	30.8	23.3
Michigan	16.6	18.3	15.8	19.5	18.7	16.7	19.1	12.1	14.5	17.5	18.9	16.6	13.8	12.9
Minnesota	20.1	32.1	22.1	38.9	35.8	17.1	19.7	14.2	16.7	20.8	18.0	23.8	21.2	21.6
Iowa	2.9	7.6	6.9	9.3	14.6	8.4	6.3	3.6	4.3	4.4	7.3	8.9	8.0	8.7
Missouri	18.0	32.5	30.4	31.6	42.5	31.4	25.6	24.8	17.0	16.1	31.9	19.3	16.9	19.7
N. Dakota	146.2	92.9	79.1	76.4	57.0	19.2	54.7	20.9	71.3	110.4	41.0	107.3	99.9	155.5
S. Dakota	35.1	26.3	19.0	28.4	15.4	4.3	25.5	.7	4.9	51.8	17.6	42.9	34.8	37.9
Nebraska	36.3	34.6	36.4	55.7	47.2	47.3	38.7	17.5	29.2	27.9	56.9	74.8	55.4	67.4
Kansas	173.3	126.6	111.7	152.2	158.1	120.3	64.1	84.3	66.9	120.2	251.9	186.3	155.6	173.2
Virginia	7.7	8.2	7.7	8.5	9.7	7.8	8.2	7.9	7.7	6.3	13.4	9.1	8.6	8.8
Maryland	7.2	6.9	7.4	9.4	9.0	8.9	8.8	7.6	6.6	5.3	9.6	10.7	9.1	8.4
Oklahoma	48.6	58.3	60.4	61.7	65.5	27.5	33.1	37.2	31.5	47.6	74.9	37.4	51.3	64.6
Texas	27.2	29.9	29.0	35.0	41.7	18.9	11.5	26.3	14.9	29.8	67.9	38.4	45.0	25.8
Montana	68.2	51.7	51.5	69.5	21.9	13.7	36.4	27.6	26.8	55.6	14.5	35.3	41.3	79.1
Idaho	27.8	26.3	21.3	32.3	28.4	22.8	21.7	19.9	16.3	27.9	17.9	29.8	29.1	31.3
Colorado	25.0	12.4	13.0	19.1	15.2	10.7	6.5	6.2	6.3	7.4	17.0	23.1	17.9	20.8
Washington	61.1	44.2	43.8	54.6	50.8	46.6	45.1	37.2	43.6	42.8	41.7	37.5	44.2	47.7
Oregon	23.4	17.0	16.1	23.5	20.4	20.3	15.5	12.6	17.6	20.1	17.7	23.6	21.5	23.2
California	11.6	11.7	12.2	12.7	17.9	16.7	14.6	9.8	12.9	11.1	7.6	10.6	11.0	14.9

UNITED STATES GRAIN SORGHUMS

Department of Agriculture estimates of acreage and production of grain sorghums (000's omitted):

State—	Acreage, all purposes Average 1930-39	Acreage, all purposes 1940	Acreage, all purposes 1941	Yield per acre Average 1930-39	Yield per acre 1940	Yield per acre 1941	Production, all purposes* Average 1930-39	Production, all purposes* 1940	Production, all purposes* 1941
Missouri	214	248	198	11.9	20.0	18.0	2,530	4,960	3,564
South Dakota	...	394	441	...	8.5	9.5	...	3,349	4,190
Nebraska	175	732	366	10.2	9.5	15.0	1,733	6,954	5,490
Kansas	1,323	2,211	1,415	9.2	12.5	17.0	11,968	27,638	24,055
Arkansas	72	67	50	9.4	17.0	15.0	679	1,139	750
Oklahoma	1,421	1,424	1,153	8.4	11.0	11.5	12,015	15,664	13,260
Texas	3,547	4,282	4,196	12.5	13.0	19.0	44,854	55,666	79,724
Colorado	253	468	459	7.9	8.5	12.5	2,064	3,978	5,738
New Mexico	320	336	371	10.2	9.0	22.5	3,396	3,024	8,348
Arizona	36	33	59	27.6	25.5	31.0	990	842	1,829
California	113	130	195	29.0	36.0	36.0	3,318	4,680	7,020
United States	7,564	10,325	8,903	11.0	12.4	17.3	84,253	127,894	153,968

*This table covers grain sorghums for all purposes, including grazed and siloed grain sorghums, and that cut and fed without removing the heads, as well as that headed and threshed for grain. The yield for grain, with an allowance for varying yields for other purposes, is applied to the total acreage to obtain an equivalent production expressed in terms of grain.

UNITED STATES FLAXSEED CROP AND ACREAGE

Department of Agriculture estimates of the United States flaxseed acreage, yield per acre, and total production, by states and calendar years:

State—	000's omitted Acreage, acres Average 1930-39	1940	1941	Yield per acre, bus Average 1930-39	1940	1941	000's omitted Production, bus Average 1930-39	1940	1941
Illinois	..	6	15	...	15.0	14.0	...	90	210
Michigan	8	8	6	8.7	9.0	9.5	64	72	57
Wisconsin	6	14	12	10.7	13.0	12.0	62	182	144
Minnesota	712	1,590	1,415	8.3	10.5	10.5	5,902	16,695	14,858
Iowa	26	199	275	9.2	13.0	12.5	235	2,587	3,438
Missouri	3	5	5	4.4	7.5	7.5	14	38	38
North Dakota	652	612	704	4.3	6.0	6.5	2,895	3,672	4,576
South Dakota	164	280	221	4.5	7.0	10.0	774	1,960	2,210
Nebraska	5	2	4	*5.4	10.0	9.5	25	20	38
Kansas	54	146	143	6.1	9.0	8.0	341	1,314	1,144
Oklahoma	..	17	20	...	7.0	7.0	...	119	140
Texas	..	29	15	...	6.0	7.0	...	174	105
Montana	118	110	148	3.7	7.0	6.0	416	770	888
Idaho	...	5	3	...	8.0	10.0	...	40	30
Arizona	...	14	14	...	18.5	21.0	...	259	294
Washington	...	5	2	...	10.0	12.0	...	50	24
Oregon	...	4	2	...	7.5	12.0	...	30	24
California	*46	134	198	*17.1	21.0	16.5	*745	2,814	3,267
United States	1,788	3,180	3,202	6.4	9.7	9.8	11,269	30,886	31,485

*Short time average.

UNITED STATES NORMAL RAINFALL IN WHEAT BELT

The following table shows normal rainfall for each month in the principal wheat growing states of the Middle West, in inches and decimal portions thereof:

	Minn.	N.D.	S.D.	Mont.	Kan.	Okla.	Texas	Neb.	Colo.	Iowa	Ill.	Mo.	Ohio	Ind.
January	.74	.47	.56	.88	.66	1.45	1.90	.55	.77	1.07	2.31	2.24	3.06	3.13
February	.75	.49	.58	.70	1.02	1.36	1.86	.72	.97	1.09	2.18	2.03	2.63	2.47
March	1.19	.70	1.12	.94	1.47	2.17	2.67	1.10	1.32	1.75	3.06	3.15	3.38	3.75
April	2.07	1.39	2.17	1.16	2.65	2.45	3.09	2.45	1.80	2.77	3.48	3.92	3.16	3.55
May	3.24	2.40	3.04	2.36	3.71	4.72	3.67	3.53	1.88	4.13	4.15	4.80	3.72	4.06
June	4.05	3.45	3.55	2.51	4.00	3.80	3.12	3.78	1.42	4.63	4.08	4.79	3.78	3.81
July	3.38	2.42	2.63	1.49	3.34	3.10	2.64	3.34	2.26	3.73	3.29	3.84	3.80	3.36
August	3.17	2.04	2.33	1.17	3.31	3.02	2.46	2.82	1.98	3.57	3.35	3.94	3.32	3.36
September	2.91	1.65	1.69	1.39	2.77	3.01	2.87	2.62	1.31	3.79	3.58	4.06	2.98	3.27
October	1.95	1.08	1.31	1.03	1.96	3.03	2.67	1.60	1.20	2.39	2.77	2.86	2.60	2.79
November	1.16	.62	.68	.42	1.26	2.00	2.25	.79	.80	1.55	2.67	2.50	2.76	3.06
December	.78	.52	.58	.89	.87	1.71	2.25	.70	.92	1.20	2.27	2.07	2.79	2.90

United States Winter Wheat Forecasts

Comparative estimates of the winter wheat crops by the Department of Agriculture, on the dates specified but not including revisions made after the year of harvest, in bushels (000,000's omitted):

	April	May	June	July	Aug.	Dec.
1941	616	653	698	682	684	671
1940	426	460	489	524	556	589
1939	549	544	523	538	551	562
1938	726	754	760	715	688	687
1937	656	654	649	664	688	685
1936	493	464	482	512	519	519
1935	435	432	441	458	432	465
1934	492	461	400	394	401	406
1933	334	337	341	336	340	351
1932	458	441	411	432	442	462
1931	644	653	649	713	775	787
1930	...	525	532	558	597	600
1929	...	595	622	582	568	578
1928	...	486	512	544	579	579
1927	...	594	537	579	552	553
1926	...	549	543	568	626	627
1925	474	445	407	404	416	402
1924	549	553	509	543	589	592
1923	572	578	581	586	568	572
1922	573	584	607	569	541	587
1921	621	629	578	573	543	600
1920	484	484	503	518	532	611

United States Spring Wheat Forecasts

Comparative estimates of the spring wheat crop by the Department of Agriculture on the dates specified, but not including revisions made after the year of harvest, in bushels (000,000's omitted):

	June	July	Aug.	Sept.	Oct.	Dec.
1941	213	241	266	273	276	275
1940	...	205	205	228	236	228
1939	...	179	181	185	189	192
1938	...	252	268	252	252	244
1937	...	219	202	198	199	189
1936	...	126	114	111	108	107
1935	...	273	174	163	167	161
1934	...	89	90	93	97	91
1933	...	160	159	166	174	176
1932	...	305	281	273	270	264
1931	...	156	118	111	109	113
1930	...	250	223	240	242	257
1929	...	251	205	217	224	234
1928	...	257	313	323	325	323
1927	...	274	298	308	314	319
1926	...	200	213	212	213	205
1925	254	276	263	284	282	275
1924	184	197	225	247	266	272
1923	236	235	225	221	214	226
1922	247	247	263	276	268	281
1921	251	235	212	209	196	215
1920	276	291	261	237	218	222

UNITED STATES CASH FARM INCOME

The Department of Agriculture estimates cash farm income, by principal sources, as follows, in thousand dollars:

State—	1940 Income from crops	1940 Income from livestock and products	1940 Government payments	1940 Total	1941 Income from crops	1941 Income from livestock and products	1941 Government payments	1941 Total
Maine	29,691	23,218	1,709	54,618	29,421	27,185	2,301	58,907
New Hampshire	6,246	15,518	401	22,165	6,706	18,678	478	25,862
Vermont	7,716	35,489	595	43,800	7,764	42,210	1,414	51,388
Massachusetts	31,766	44,567	619	76,952	38,661	52,268	734	91,663
Rhode Island	3,582	6,600	69	10,251	4,269	7,523	89	11,881
Connecticut	22,462	33,902	662	57,026	24,977	39,413	631	65,021
New York	107,210	230,953	6,211	344,374	126,811	279,716	6,018	412,545
New Jersey	47,481	56,656	1,108	105,245	57,551	65,601	790	123,942
Pennsylvania	80,296	195,524	6,679	282,499	90,111	231,403	6,240	327,754
Ohio	98,228	220,364	16,971	335,563	132,373	289,733	12,789	434,895
Indiana	69,788	202,124	22,657	294,569	99,624	279,840	14,525	393,989
Illinois	202,366	340,835	35,750	578,951	250,307	452,539	33,509	736,355
Michigan	86,773	147,717	12,773	247,263	110,411	191,134	6,724	308,269
Wisconsin	38,380	269,623	12,273	320,276	47,590	376,627	12,936	437,153
Minnesota	105,506	270,164	40,552	416,222	127,511	370,558	19,619	517,688
Iowa	165,447	504,309	49,235	718,991	156,150	723,243	40,122	919,515
Missouri	63,888	206,808	25,091	295,787	93,251	294,069	16,782	404,102
North Dakota	70,099	57,576	27,021	154,696	122,632	80,398	24,670	227,700
South Dakota	31,678	88,175	20,016	139,869	46,252	129,432	12,009	187,693
Nebraska	50,199	176,473	46,296	274,968	69,536	222,046	15,899	307,481
Kansas	88,578	165,578	38,941	293,097	161,506	234,466	31,742	427,714
Delaware	8,067	11,551	571	20,189	8,918	14,529	536	23,983
Maryland	32,280	38,765	2,783	73,828	43,107	46,314	1,588	91,009
Virginia	62,696	59,031	4,724	126,451	77,821	73,916	6,524	158,260
W. Virginia	11,970	28,480	1,920	42,370	13,938	35,612	2,523	52,073
N. Carolina	164,721	36,684	14,876	216,281	240,481	48,182	14,474	303,137
S. Carolina	82,949	18,732	16,787	118,468	76,468	24,455	15,218	116,141
Georgia	109,788	32,918	24,419	167,125	124,433	45,537	20,213	190,183
Florida	91,473	18,869	4,068	114,410	113,104	23,283	3,890	140,277
Kentucky	75,233	71,825	13,318	160,376	96,950	96,268	13,833	207,051
Tennessee	67,065	58,483	16,207	141,755	110,616	80,363	12,424	203,403
Alabama	60,952	28,391	25,851	115,194	103,907	38,202	19,237	161,346
Mississippi	76,103	30,255	32,681	139,039	167,489	43,365	19,592	230,446
Arkansas	97,410	37,593	25,726	160,729	178,585	57,266	23,266	259,117
Louisiana	67,933	27,534	21,902	117,369	84,251	36,544	16,799	137,594
Oklahoma	89,477	93,200	25,638	208,315	123,591	132,985	21,035	277,611
Texas	262,824	239,827	86,489	589,140	403,144	303,331	63,647	770,122
Montana	44,419	53,710	14,571	112,700	66,224	74,982	12,443	153,649
Idaho	40,291	48,973	8,167	97,431	54,164	63,984	5,948	124,096
Wyoming	8,794	44,944	3,684	57,422	12,328	51,361	3,539	67,228
Colorado	47,434	85,267	10,112	142,813	60,667	101,123	9,382	171,172
New Mexico	15,005	41,619	4,652	61,276	22,131	45,940	3,796	71,867
Arizona	27,590	27,666	3,986	59,242	45,898	33,912	3,255	83,065
Utah	12,251	33,533	2,830	48,614	16,492	44,896	2,545	63,933
Nevada	1,433	12,047	226	13,706	1,690	15,078	233	17,001
Washington	78,113	61,898	6,443	146,454	116,863	82,904	5,665	205,432
Oregon	48,783	62,108	5,699	116,590	66,626	80,441	4,545	151,612
California	417,091	223,581	21,840	662,512	561,023	288,253	19,501	868,777
United States	3,509,525	4,821,657	765,799	9,096,981	4,794,323	6,391,107	585,672	11,771,102

Farm Animals in United States

Number of farm animals in the United States on Jan. 1, as estimated by the Department of Agriculture (000's omitted):

	Horses	Mules	Milch cows
1942	9,856	3,811	26,303
1941	10,214	3,922	25,478
1940	10,442	4,039	24,926
1939	10,815	4,384	25,088
1938	11,128	4,428	24,834
1937	11,445	4,568	24,993
1936	11,635	4,684	24,439
1935	11,861	4,822	26,069
1934	12,052	4,945	26,931
1933	12,291	5,046	25,936
1932	12,664	5,143	24,896
1931	13,195	5,373	23,820
1930	13,742	5,382	23,032
1929	13,897	5,389	21,919
1928	14,495	5,504	21,828
1927	15,133	5,652	21,801
1926	15,830	5,739	22,188
1925	16,489	5,725	22,481
1924	18,059	5,446	24,786
1923	18,627	5,485	24,437
1922	19,056	5,467	24,082
1921	19,208	5,455	23,594

	Other cattle	Sheep	Swine
1942	74,607	55,979	60,526
1941	71,461	54,283	54,256
1940	68,197	52,399	61,115
1939	66,789	53,783	49,293
1938	66,083	52,682	44,218
1937	66,803	52,489	49,011
1936	67,929	52,022	42,837
1935	68,529*	52,245	39,004
1934	74,262*	53,713	58,621
1933	70,214*	53,075	62,127
1932	65,770*	53,974	59,301
1931	63,030*	53,233	54,835
1930	61,003*	51,565	55,705
1929	34,470	47,704	57,410
1928	33,848	44,795	60,617
1927	35,031	41,880	54,788
1926	36,934	39,730	52,148
1925	39,515	38,112	55,568
1924	41,720	38,300	66,130
1923	42,803	37,223	58,227
1922	41,550	36,327	57,834
1921	41,993	37,452	56,097

*All cattle, including milk cows.

United States Livestock Values

Estimated average value per head of livestock on farms in the United States on Jan. 1 of each year, as reported by the Department of Agriculture:

	Horses	Milch cows	Sheep
1942	$64.81	$77.92	$8.62
1941	58.27	60.90	6.73
1940	77.34	57.28	6.31
1939	84.34	55.68	5.75
1938	90.96	54.44	6.12
1937	99.18	50.39	6.02
1936	96.82	49.27	6.38
1935	77.05	30.17	4.31
1934	66.88	27.00	3.79
1933	54.12	29.18	2.91
1932	53.48	39.51	3.40

	Mules	All cattle	Swine
1942	$107.52	$55.13	$15.64
1941	107.21	43.26	8.34
1940	116.83	40.58	7.78
1939	117.64	38.45	11.21
1938	122.65	36.58	11.26
1937	129.93	34.06	11.89
1936	120.36	34.09	12.72
1935	99.34	20.22	6.31
1934	82.42	17.78	4.09
1933	60.42	19.74	4.21
1932	60.70	26.40	6.13

United States Potato Crop

Department of Agriculture estimates of the United States potato production, by calendar years (000's omitted):

	Acreage	Production, bus
1941	2,733	357,783
1940	2,865	378,103
1939	3,018	363,159
1938	3,023	374,163
1937	3,185	394,139
1936	3,063	331,918
1935	3,541	386,380
1934	3,597	406,105
1933	3,412	342,306
1932	3,549	376,425
1931	3,467	384,125
1930	3,103	340,572
1929	3,019	332,204
1928	3,499	427,249
1927	3,182	369,644
1926	2,811	321,607
1925	2,810	296,466
1924	3,106	384,166
1923	3,350	364,032
1922	3,901	415,373
1921	3,598	325,312

United States Durum Wheat Crop

Durum wheat crop in Minnesota, North and South Dakota and Montana since 1924, as reported by the Department of Agriculture (000's omitted):

	Acres	Yield per acre, bus	Production, bus
1941*	2,546	16.4	41,800
1940*	3,029	11.1	33,479
1939*	3,058	11.2	34,264
1938*	3,569	11.4	40,697
1937*	2,786	10.0	27,971
1936*	1,538	5.2	8,073
1935	2,262	10.5	23,821
1934	876	7.4	6,507
1933	2,304	7.3	16,715
1932	3,984	10.3	41,062
1931	2,964	7.1	21,133
1930	4,701	12.2	57,391
1929	5,571	9.8	54,710
1928	6,804	14.1	95,802
1927	5,445	14.4	78,359
1924	3,674	16.1	59,114
1925	4,158	14.0	58,010
1926	4,577	9.3	42,469

*Not including Montana.

Seeding in the Northwest

The Minneapolis Chamber of Commerce, by investigation, has ascertained that in—

SOUTH DAKOTA

Seeding commences the latter part of March, and becomes general about April 1. In the southeastern part, it is completed April 15-20, and in other parts about May 1.

MINNESOTA

In central and southern parts, seeding commences latter part of March, and becomes general about April 15. In the southern part of the state approximately 50% of the seeding is completed April 15-20, and in the central part about 35% at the same time. In the southern half, seeding is completed about May 1, and in other parts May 10.

NORTH DAKOTA

Seeding commences April 1 and becomes general in southern part April 18-20. Seeding becomes general throughout the state from April 20 to 28, and is completed about May 12.

UNITED STATES CROPS AND VALUE

Department of Agriculture estimates of acreage, yield per acre and weighted average price for crop marketing season (000's omitted in total crop and acreage):

Winter wheat—	Acres	Crop Bus acre	Crop Total bus	Value bu
1941	39,547	17.0	671,293	$.966
1940	35,789	16.5	588,802	.690
1939	38,078	15.0	569,741	.694
1938	49,786	13.8	688,133	.573
1937	46,978	14.6	685,824	.978
1936	37,687	13.8	519,874	1.020
1935	33,402	13.9	465,319	.827
1934	34,688	12.6	437,963	.844
1933	30,272	12.4	376,518	.777
1932	36,056	13.6	491,795	.391
1931	43,448	18.9	825,396	.382
1930	41,069	15.4	633,605	.693
1929	41,194	14.2	586,239	1.043
1928	36,853	15.7	579,066	*1.030
1927	38,195	14.4	548,188	1.165
1926	37,597	16.8	631,607	1.209
1925	31,964	12.5	400,619	1.478
1924	35,418	16.2	573,563	1.316
1923	38,712	14.3	555,299	.945
1922	41,649	13.7	571,459	1.042
1921	43,160	14.0	602,793	.945
1920	40,409	15.2	613,227	1.477
1919	50,404	14.8	748,460	2.104
1918	37,171	15.0	556,506	2.063
1917	26,825	14.5	389,956	2.028
1916	34,078	13.4	456,118	1.627
1915	39,597	16.2	640,565	.947
1914	36,203	18.5	670,945	.986
Spring wheat, including durum—				
1941	16,284	16.9	274,644	.927
1940	17,191	13.0	223,572	.662
1939	15,404	11.8	181,694	.686
1938	20,083	12.1	243,569	.527
1937	17,444	10.9	189,852	.907
1936	11,176	9.6	106,892	1.053
1935	17,827	9.0	161,025	.846
1934	8,762	10.1	88,430	.869
1933	19,166	9.1	175,165	.673
1932	21,783	12.2	265,132	.366
1931	14,233	8.2	116,278	.454
1930	21,545	11.7	252,865	.616
1929	22,138	10.7	236,978	1.019
1928	22,373	15.0	335,307	*.897
1927	21,433	15.3	326,871	1.038
1926	19,019	10.5	200,606	1.202
1925	20,479	13.1	268,081	1.296
1924	17,045	15.7	268,054	1.291
1923	18,208	11.2	204,183	.831
1922	19,748	13.9	275,190	.879
1921	21,406	10.1	216,171	.788
1920	21,949	10.5	230,050	1.314
1919	23,296	8.7	203,637	2.228
1918	23,897	14.5	347,624	....
1917	19,962	11.5	229,834	....
1916	19,432	9.2	178,454	....
1915	20,706	17.8	368,072	....
1914	19,410	11.7	226,542	....
All wheat—				
1941	55,831	16.9	945,937	.956
1940	52,980	15.3	812,374	.682
1939	53,482	14.1	751,435	.692
1938	69,869	13.3	931,702	.561
1937	64,422	13.6	875,676	.963
1936	48,863	12.8	626,766	1.026
1935	51,229	12.2	626,344	.832
1934	43,400	12.1	526,393	.848
1933	49,438	11.2	551,683	.744
1932	57,839	13.1	756,927	.382
1931	57,681	16.3	941,674	.391
1930	62,614	14.2	886,470	.671
1929	63,332	13.0	823,217	1.036
1928	59,226	15.4	914,373	*.981
1927	59,628	14.7	875,059	1.117
1926	56,616	14.7	832,213	1.207
1925	53,443	12.8	668,706	1.405
1924	52,463	16.0	841,617	1.308
1923	56,920	13.3	759,482	*.914
1922	61,397	13.8	846,649	.989
1921	64,566	12.7	818,964	.903
1920	62,358	13.5	843,277	1.433
1919	73,700	12.9	952,097	2.131
1918	61,068	14.8	904,130	2.036
1917	46,787	13.2	619,790	1.997
1916	53,510	11.9	634,572	1.601
1915	60,303	16.7	1,008,637	.911
1914	55,613	16.1	897,487	.985
Corn—				
1941	86,089	31.0	2,672,541	.709
1940	86,738	28.4	2,460,624	.618
1939	88,430	29.4	2,602,133	.567
1938	92,222	27.8	2,562,197	.500
1937	93,741	28.3	2,651,284	.518
1936	93,020	16.2	1,507,089	1.045
1935	95,804	24.0	2,303,747	.655
1934	92,354	15.8	1,461,123	.815
1933	105,963	22.5	2,399,632	.522
1932	110,577	26.5	2,931,231	.319
1931	106,912	24.1	2,575,611	.320
1930	101,466	20.5	2,080,437	.596
1929	97,805	25.8	2,521,032	.799
1928	100,336	26.6	2,665,516	*.840
1927	98,357	26.6	2,616,120	.850
1926	99,452	25.6	2,546,972	.745
1925	101,331	27.6	2,798,367	.699
1924	100,420	22.1	2,223,123	1.061
1923	101,123	28.4	2,875,292	.825
1922	100,345	27.0	2,707,306	.745
1921	103,155	28.4	2,928,442	.523
1920	101,359	30.3	3,070,604	.618
1919	98,145	27.3	2,678,541	1.513
1918	102,195	23.9	2,441,249	1.522
1917	110,893	26.2	2,908,242	1.459
1916	100,561	24.1	2,425,206	1.166
1915	100,623	28.1	2,829,044	.680
1914	97,796	25.8	2,523,750	.708
Oats—				
1941	37,972	31.0	1,176,107	.387
1940	35,393	35.2	1,246,050	.303
1939	32,968	28.4	935,942	.311
1938	35,661	30.0	1,068,431	.237
1937	35,256	32.9	1,161,612	.301
1936	33,370	23.5	785,506	.449
1935	39,831	30.0	1,194,902	.263
1934	29,455	18.4	542,306	.480
1933	36,532	20.1	733,166	.335
1932	41,703	30.0	1,250,955	.157
1931	40,242	27.9	1,123,892	.213
1930	39,850	32.0	1,274,698	.322
1929	38,153	29.2	1,113,050	.418
1928	40,128	32.7	1,313,914	*.407
1927	40,350	27.1	1,093,221	.471

Oats— Continued	Acres	Crop Bus acre	Crop Total bus	Value bu
1926	42,854	26.9	1,152,911	.400
1925	44,240	31.8	1,405,268	.389
1924	41,857	33.8	1,416,120	.478
1923	40,245	30.5	1,227,184	.407
1922	40,324	28.5	1,147,905	.374
1921	45,539	23.0	1,045,270	.322
1920	42,732	33.8	1,444,291	.538
1919	39,601	27.9	1,106,603	.767
1918	42,464	33.6	1,428,611	.685
1917	41,604	34.7	1,442,519	.701
1916	39,098	29.1	1,138,969	.487
1915	38,802	37.0	1,435,270	.383
1914	37,213	28.7	1,066,328	.439
Barley—				
1941	14,049	25.5	358,709	.494
1940	13,496	23.0	310,108	.397
1939	12,644	21.7	274,767	.402
1938	10,513	24.1	253,005	.366
1937	9,968	22.1	220,327	.540
1936	8,372	17.6	147,475	.734
1935	12,371	23.1	285,774	.378
1934	6,553	17.8	116,680	.686
1933	9,687	15.9	153,767	.435
1932	13,178	22.6	298,313	.221
1931	11,189	17.8	199,391	.328
1930	12,595	23.8	300,205	.405
1929	13,526	20.7	279,924	.539
1928	12,735	25.8	328,351	*.568
1927	9,465	25.3	239,071	.689
1926	7,917	21.0	166,030	.579
1925	8,186	23.5	192,466	.614
1924	7,038	23.5	165,318	.742
1923	7,151	23.2	158,994	.546
1922	6,601	23.2	162,908	.499
1921	7,074	18.8	132,702	.478
1920	7,439	23.0	171,042	.844
1919	6,579	19.9	131,086	1.244
1918	9,198	24.5	225,067	.951
1917	8,453	21.6	182,209	1.322
1916	7,623	30.9	159,157	.804
1915	7,279	28.4	206,976	.520
1914	7,663	23.2	177,712	.537
Rye—				
1941	3,498	12.9	45,191	.531
1940	3,210	12.8	41,149	.416
1939	3,832	10.2	39,049	.440
1938	4,021	13.8	55,564	.338
1937	3,846	13.0	49,830	.686
1936	2,774	9.1	25,319	.809
1935	4,141	14.2	58,597	.395
1934	2,035	8.4	17,070	.718
1933	2,418	8.9	21,418	.627
1932	3,351	11.8	39,424	.281
1931	3,162	10.6	33,378	.341
1930	3,631	12.4	45,068	.445
1929	3,130	11.3	35,282	.857
1928	3,310	11.5	37,910	*.836
1927	3,458	14.8	51,070	.835
1926	3,419	10.2	34,860	.830
1925	3,800	11.1	42,316	.790
1924	3,941	14.8	58,445	.953
1923	4,936	11.3	55,961	.593
1922	6,757	14.9	100,986	.639
1921	4,851	12.6	61,023	.840
1920	4,825	12.8	61,915	1.464
1919	7,168	11.0	78,659	1.459
1918	6,694	12.5	83,421	1.496
1917	5,059	11.9	60,321	1.734
1916	3,528	12.2	43,089	1.124
1915	3,417	13.7	46,752	.840
1914	3,144	13.4	42,120	.823
Buckwheat—				
1941	339	17.9	6,070	.648
1940	389	16.7	6,493	.538
1939	374	15.2	5,669	.628
1938	451	14.8	6,654	.544
1937	426	15.9	6,764	.669
1936	375	16.8	6,285	.852
1935	503	16.6	8,332	.550
1934	477	18.9	9,026	.586
1933	462	17.0	7,844	.558
1932	454	14.8	6,727	.434
1931	505	17.6	8,890	.423
1930	573	12.1	6,960	.789
1929	627	13.9	8,692	.963
1928	679	14.9	10,117	*.899
1927	764	16.8	12,820	.869
1926	679	16.2	10,976	.871
1925	742	16.9	12,559	.872
1924	737	17.0	12,508	1.074
1923	689	16.8	11,596	.958
1922	729	16.2	11,776	.895
1921	640	18.5	11,822	.879
1920	729	16.7	12,193	1.254
1919	733	17.3	12,707	1.587
1918	1,018	14.1	14,404	1.639
1917	926	14.7	13,605	1.671
1916	786	13.1	10,302	1.266
1915	754	16.6	12,523	.816
1914	752	17.2	12,919	.806
Flaxseed—				
1941	3,202	9.8	31,485	1.720
1940	3,180	9.7	30,886	1.420
1939	2,250	9.0	20,152	1.460
1938	936	8.7	8,152	1.590
1937	934	7.6	7,089	1.870
1936	1,126	4.7	5,273	1.900
1935	2,096	6.9	14,520	1.419
1934	995	5.7	5,661	1.699
1933	1,341	5.1	6,804	1.626
1932	1,988	5.8	11,511	.881
1931	2,431	4.8	11,755	1.167
1930	3,780	5.7	21,673	1.610
1929	3,049	5.2	15,924	2.812
1928	2,611	7.3	19,118	*1.938
1927	2,763	9.1	25,174	1.925
1926	2,736	6.8	18,531	2.032
1925	3,022	7.4	22,334	2.264
1924	3,535	8.8	31,220	2.179
1923	2,015	8.2	16,563	2.125
1922	1,113	9.5	10,520	2.076
1921	1,143	7.1	8,107	1.654
1920	1,647	6.6	10,900	2.328
1919	1,298	5.2	6,770	4.421
1918	1,783	7.2	12,779	3.576
1917	1,881	4.5	8,402	2.114
1916	1,298	9.1	11,829	2.309
1915	1,116	10.1	11,270	1.678
1914	1,561	8.3	12,940	1.306

*Previous to 1929 this figure represents Dec. 1 farm value.

When Crops Are Harvested in the United States

Usual percentage of crops harvested in months indicated, based upon estimates of the Bureau of Crop Estimates:

	Per cent			
Wheat—	June	July	Aug.	Sept.
New York	..	78	20	2
Pennsylvania	3	90	7	..
Virginia	68	31	1	..
Ohio	15	84	1	..
Indiana	34	63	3	..
Illinois	35	59	6	..
Michigan	..	75	23	2
Minnesota	..	21	76	3
Missouri	61	38	1	..
North Dakota	..	3	75	22
South Dakota	..	31	66	3
Nebraska	3	92	5	..
Kansas	49	51	..	..
Oklahoma	70	28	..	..
Texas	70	23	..	..
Montana	..	17	60	23
Washington	..	26	55	19
United States	22.0	42.3	28.4	6.5
Oats—				
New York	..	20	70	10
Pennsylvania	..	31	64	5
Ohio	..	59	41	..
Indiana	2	72	26	..
Illinois	4	80	16	..
Wisconsin	..	31	67	2
Minnesota	..	35	62	3
Iowa	1	80	19	..
North Dakota	..	8	70	22
South Dakota	..	43	55	2
Nebraska	1	79	20	..
Kansas	27	73	..	..
Oklahoma	60	39	..	..
Texas	64	24	1	..
Montana	..	9	61	30
United States	7.9	52.9	34.2	3.8
Barley—				
Wisconsin	..	67	33	..
Minnesota	..	69	29	2
North Dakota	..	25	68	7
South Dakota	..	70	28	2
California	33	41	18	3
United States	8.2	51.6	33.9	4.9
Rye—				
New York	1	76	22	1
Pennsylvania	5	87	8	..
Indiana	38	59	3	..
Michigan	1	76	23	..
Wisconsin	2	78	20	..
Minnesota	3	84	13	..
North Dakota	..	65	35	..
South Dakota	1	82	17	..
Nebraska	9	85	6	..
United States	11.3	71.5	16.3	0.7
Buckwheat—				
New York	..	..	4	69
Pennsylvania	..	..	3	68
Michigan	..	..	3	64
United States	..	0.8	6.7	64.9
Flaxseed—				
Minnesota	..	6	50	41
North Dakota	..	..	28	62
South Dakota	..	4	37	51
Montana	..	..	30	59
United States	0.1	3.0	31.5	56.5
Rice—				
Louisiana	..	1	22	45
Texas	..	2	23	30
Arkansas	..	..	1	28
California	..	..	..	5
United States	..	0.9	15.3	33.0

Texas harvests 7% of its wheat crop in May, and Oklahoma 2%; .5% of the country's wheat crop is harvested in May, and .3% in October. One per cent of the country's oats crop (11% of the Texas crop and 1% of Oklahoma's) is harvested in May, and .2% in October. Of the barley crop, 1.2% (5% of California's crop) is harvested in May, and .2% in October. Of the rye crop, .2% is harvested in May, and .7% (1% of New York's crop) in October. Of the buckwheat crop, 26.7% is harvested in October and .9% in November. Of the flax crop, 8.9% is harvested in October. Of the rice crop, 33.8% is harvested in October, 14.6% in November, and 2.4% in December.

U. S. Spring Wheat Acreage Seeded

Department of Agriculture estimates of the acreage sown to spring wheat, 1940, compared with the revised estimate of the acreage in the previous year (acres, 000's omitted):

	All spring		Durum		Other sprg	
	1940	1941	1940	1941	1940	1941
Maine	2	2	..	..	2	2
New York	4	4	..	..	4	4
Pa.	10	10	..	..	10	10
Ohio	1	1	..	..	1	1
Indiana	6	6	..	..	6	6
Illinois	15	11	..	..	15	11
Michigan	12	12	..	..	12	12
Wisconsin	44	41	..	..	44	41
Minnesota	1,455	1,334	89	77	1,366	1,257
Iowa	27	39	..	..	27	39
N. Dak.	8,444	8,410	2,662	2,050	5,782	6,360
S. Dak.	2,909	2,852	619	470	2,290	2,382
Nebraska	192	144	..	..	192	144
Kansas	35	27	..	..	35	27
Montana	2,871	2,440	..	..	2,871	2,440
Idaho	335	338	..	..	335	338
Wyoming	110	100	..	..	110	100
Colorado	344	224	..	..	344	224
N. Mex.	22	23	..	..	22	23
Utah	68	70	..	..	68	70
Nevada	13	13	..	..	13	13
Wash.	1,083	487	..	..	1,083	487
Oregon	246	153	..	..	246	153
U. S.	18,248	16,471	3,370	2,597	14,878	14,144

United States Cotton Crop

Department of Agriculture estimates of the United States cotton acreage (in acres left for harvest, 000's omitted) and production (in bales of 500 lbs, 000's omitted):

	Acreage		Production	
State—	1940	1941	1940	1941
Missouri	408	412	388	490
Virginia	32	36	25	28
N. Carolina	829	796	739	556
S. Carolina	1,234	1,172	966	405
Georgia	1,935	1,826	1,010	624
Florida	65	65	21	17
Tennessee	715	700	509	600
Alabama	1,961	1,755	779	790
Mississippi	2,500	2,375	1,250	1,420
Arkansas	2,061	2,020	1,501	1,445
Louisiana	1,130	1,032	456	315
Oklahoma	1,822	1,658	802	750
Texas	8,472	7,794	3,234	2,745
N. Mexico	107	114	128	115
Arizona	220	250	195	203
California	348	351	545	446
All other	22	20	18	27
U. States	23,861	22,376	12,566	10,976

United States Wheat Seedings in Principal States

All wheat acreage sown in principal states, in million acres, as reported by the Department of Agriculture:

Harvest year	N. Dakota	S. Dakota	Montana	Nebraska	Kansas	Oklahoma	Texas	Washington
1941...	8.4	2.8	4.2	3.5	13.0	5.0	3.9	2.1
1940...	8.4	2.9	3.4	3.7	14.0	4.8	4.7	2.3
1939...	8.2	3.0	3.8	4.0	13.9	4.9	3.9	1.9
1938...	10.2	3.9	4.8	4.7	16.9	6.3	5.3	2.2
1937...	10.2	3.6	4.9	5.0	17.1	5.6	5.3	2.6
1936...	10.8	4.2	4.9	4.0	14.2	4.8	5.1	2.6
1935...	10.8	3.6	4.1	3.7	13.5	4.7	4.9	2.1
1934...	9.3	3.0	3.7	3.4	12.7	4.3	4.5	2.0
1933...	11.4	4.3	4.1	3.3	13.2	4.4	4.8	3.0
1932...	10.9	3.9	4.5	3.3	13.0	4.4	4.7	2.4
1931...	10.2	3.5	4.2	3.6	13.9	4.6	4.6	2.4
1930...	10.0	3.9	4.6	4.1	13.7	4.6	4.0	2.7
1929...	10.7	3.8	4.8	4.0	13.1	4.9	3.3	2.5
1928...	11.0	3.8	4.6	4.2	12.8	5.0	3.1	2.3
1927...	10.3	3.3	4.1	3.9	12.8	4.8	2.9	2.2
1926...	9.5	2.9	3.8	3.5	11.7	4.4	2.2	2.0
1925...	9.3	2.8	3.9	3.3	10.9	4.5	2.1	2.8
1924...	8.7	2.4	3.2	3.2	10.2	3.8	1.4	2.1
1923...	8.9	3.2	3.5	4.2	11.5	4.2	1.7	2.1
1922...	9.4	3.0	3.5	4.4	12.3	4.5	1.8	2.2
1921...	11.1	3.1	3.9	4.0	11.5	4.3	2.2	2.2
1920...	10.0	3.2	4.1	3.9	10.6	4.3	1.7	2.6

Crop Reports to Be Issued by the Crop Reporting Board in 1942

(Formal release in room 2862, South Building.)

During the year 1942 the Crop Reporting Board of the Agricultural Marketing Service shall publish on dates hereinafter specified, unless other dates be prescribed by law or amendment to these regulations, and in the manner specified in Secretary's Memorandum No. 833, entitled "Preparation of the Monthly Crop Reports of the Department of Agriculture," reports concerning crops grown in the United States as follows:

REPORTS CONCERNING GENERAL CROPS

(United States and State Data)

At 3 p.m.—
Friday, Jan. 9.
Friday, April 10.
Monday, May 11.
Wednesday, June 10.
Friday, July 10.
Monday, Aug. 10.
Thursday, Sept. 10.
Friday, Oct. 9.
Tuesday, Nov. 10.
Friday, Dec. 18.*
Monday, Dec. 21.†

*Summary of 1942 crop production. †Seedings of winter wheat and rye, 1943 crop.

The time of publication specified for each report above is Eastern Standard Time, and no person or persons other than members of the board and employees actually engaged in the preparation of these reports shall have access to any report or to the data used in the preparation of any report before the hour of release indicated above.

Terms of Shipment

At the annual meeting of directors, delegates and members of the Millers National Federation in Chicago, April 9, 1915, these definitions applying to shipment of flour and feed were adopted:

"Immediate," shipment within three days from date of receipt of shipping instructions, including day instructions are received.

"Quick," shipment within seven days from date of receipt of shipping instructions, including day instructions are received.

"Prompt," shipment within 14 days from date of receipt of shipping instructions, including day instructions are received.

At the Federation meeting on Oct. 14, 1921, these definitions were reaffirmed, but a resolution was adopted adding the word "calendar" before the word "days" in each instance, so as to obviate any possible confusion.

At the Federation meeting Oct. 20, 1922, a resolution was adopted construing shipment "at once" as identical with "immediate" shipment.

Crackers in Paraguay

In Paraguay, wheat flour for making crackers (galleta) must be mixed with domestically produced hard white corn flour in proportions to be determined later, but not to exceed one tenth of corn flour.

THE MARKETS UNDER THE DEFENSE PROGRAM

(Continued from page 20.)

During the year the enactment of the Pace amendment to the Commodity Exchange Act had an important bearing on the work of the administration. Approved Oct. 9, 1940, the amendment included a number of commodities, the regulation of which is important for defense purposes. In the longer view, the Pace amendment rounded out to near-completion the list of supervised commodities which began with the passage of the Grain Futures Act nearly 20 years ago.

The most important commodities covered by the amendment are cottonseed oil, lard, tallow, soybeans, soybean oil, cottonseed meal and soybean meal. With the addition of these commodities, the supervised list now includes most of the domestic farm commodities in which futures trading is conducted. Important exceptions are hides, sugar and grease wool.

Three of the commodity exchanges authorized to conduct futures markets in Pace act commodities were already being supervised with respect to other commodities. These were the Chicago Board of Trade (soybeans, cottonseed oil and lard), the Chicago Open Board of Trade (soybeans), and the New Orleans Cotton Exchange (cottonseed oil). Two other exchanges were designated. These were the New York Produce Exchange (cottonseed oil, soybean oil and tallow), and the Memphis Merchants Exchange Clearing Association (cottonseed meal and soybean meal).

In the fiscal year 1941, trading in the principal Pace amendment commodities—fats and oils and soybeans—reached high levels. The estimated value of futures transactions in these commodities was more than $1,000,000,000 compared to $400,000,000 in 1940. Trading in cottonseed oil amounted to 3,319,000,000 lbs, an increase of 36% over 1940; and in lard, 2,421,000,000 lbs, a 61% increase. Trading in soybeans aggregated 611,000,000 bus, more than five times the 1940 level.

During the year regulations were issued requiring periodic reports from exchange members, commission merchants and large traders in the fats and oils, soybean meal, cottonseed meal and soybean markets. The trading controls and safeguards against manipulation and malpractices which were set up were similar to those already maintained under earlier legislation for grains, cotton and other commodities.

Altogether, a total of 18 contract markets were supervised during the 1941 fiscal year. The number of commodities in which trading was conducted was 21. The contract markets and the respective commodities traded in are as follows:

Chicago Board of Trade, wheat, corn, oats, rye, cotton, soybeans, lard, cottonseed oil.

Chicago Mercantile Exchange, butter, eggs, potatoes.

Chicago Open Board of Trade, wheat, corn, oats, rye, soybeans.

Duluth Board of Trade, wheat.

Kansas City Board of Trade, wheat, corn, wheat bran, shorts.

Los Angeles Grain Exchange, barley.

Memphis Merchants Exchange Clearing Association, cottonseed meal, soybean meal.

Milwaukee Grain and Stock Exchange, wheat, corn, oats, rye.

Minneapolis Chamber of Commerce, wheat, corn, oats, rye, barley, flaxseed.

New Orleans Cotton Exchange, cotton, cottonseed oil.

New York Cotton Exchange, cotton.

New York Mercantile Exchange, butter, eggs.

New York Produce Exchange, cottonseed oil, soybean oil, tallow.

Portland Grain Exchange, wheat.

St. Louis Merchants Exchange, wheat bran, shorts, middlings.

San Francisco Grain Exchange, barley; last trade at San Francisco on Dec. 8, 1939.

Seattle Grain Exchange, wheat.

Wool Associates of the New York Cotton Exchange, wool tops.

The exchanges were asked to appoint special committees representing the various merchandising and processing interests to study the questions involved and report their findings.

In studying the problem of preventing unwarranted speculative price movements the administration suggested that the committees consider such points as (1) methods for determining when speculation is becoming an undue price factor, (2) higher standards for selection of customers' accounts, and (3) customers' margin requirements as a means of market control.

On the second problem, that of making adjustments to long-time changes in agricultural marketing, consideration of such points as the following was suggested: (1) methods of rendering the markets less dependent on speculation for necessary volume, (2) commission charges for nonmembers, (3) trading units for small hedgers, and (4) equity of exchange rules as between various trade interests.

All of the exchanges appointed special committees and some of them made extensive reports to the administration. The reports were devoted largely to justification of futures trading rather than to recommendations for improved service and adjustments to present-day conditions. They stressed the view that the futures trading system is dependent on speculative trading, and attributed the shrinkage in volume to the activities of governmental agencies, particularly crop loans. The reports were hopeful of the outlook for the exchanges, and were strong in the belief of the necessity of futures trading during the national emergency, as well as in normal times.

Up to the time of the German campaigns in the Low Countries and France in 1940, wheat made the best gains of any major farm commodity. The monthly average of the dominant futures on the Chicago Board of Trade advanced from about 66c, in August, 1939, to approximately $1.07 in April, 1940. On the latter date the government owned very little wheat. The Nazi blitzkrieg in May and June virtually eliminated the prospect of exports; wiped out most of the wartime price advance, and created a near panic on the grain exchanges. To help prevent further demoralization of the wheat price structure, the grain exchanges temporarily pegged wheat futures prices at the request of the Secretary of Agriculture.

Prices gradually adjusted themselves to the new situation. The temporary restrictions on trading were removed in June, but the downward trend in prices continued. It reached bottom in August. Cash and futures prices at Chicago were all under 75c. At these levels farmers took refuge in the government loan, which was 81c, Chicago basis, for No. 2 hard winter wheat. Heavy impounding of wheat stocks during the fall and winter months tended to hold back the seasonal movement into trade channels, and by the first of the year the cash price of No. 2 hard winter wheat at Chicago was well over 90c.

Futures prices, particularly the distant futures, lagged behind the cash level. With production and supply estimates being revised upward, there was little speculative interest in distant futures. Prices tended to decline until the latter part of February when the introduction of new parity legislation in Congress brought a resumption in the general upward trend. By June, the average cash and futures prices at Chicago were well above a dollar; but below the new loan level of $1.15, Chicago basis.

A conspicuous feature of wheat futures prices during the year was the "inverted" pattern of the market, that is, the near futures selling above the distant months. In the late summer and fall of 1940, it was expected that large supplies of wheat would be available, and lower prices were indicated. Visible supply data showed considerably larger warehouse and storage stocks than at the same period a year earlier, but a considerable proportion consisted of loan stocks. The heavy impounding of wheat during the fall and winter months, and the attendant scarcity of "free" wheat, resulted in an active demand for wheat for near-by delivery. This put a premium on the near futures as compared with the distant months. From October through February, the near futures sold as much as 5@8c above the distant month. The average price of the distant futures remained at a discount under the near month until June, 1941.

On all contract markets the total volume of futures transactions in grains, including soybeans, was 6,738,000,000 bus in the 1941 fiscal year. This was a decrease of 37% compared with the 1940 total of 10,761,000,000 bus.

The daily average of open contracts in wheat, corn and oats declined sharply in the 1941 fiscal year as compared with 1940. On all markets, the daily average of open contracts in wheat futures was 80,688,000 bus, a decrease of 33% compared with 1940. The daily average of open contracts in corn was 24,331,000 bus, a decrease of 40%; oats, 11,954,000 bus, a decrease of 26%. Open contracts in barley were only about one fourth the 1940 level. The daily average of traders' commitments in rye and flaxseed showed increases of 14 and 36%, respectively.

The trend of open contracts within the year was generally downward for wheat, corn and oats. Open contracts in wheat declined almost steadily from a high of 114,882,000 bus in August, 1940, to a low of 65,142,000 bus in June, 1941. The customary rise in open contracts during the fall and early winter marketing season did not occur in wheat, oats and rye, and was not very pronounced in corn.

Canadian Grain Commissioners

The following is a list of the commissioners and permanent officers of the Board of Grain Commissioners working under the Canada Grain Act:

Chief commissioner, D. G. McKenzie, Winnipeg.

Commissioners: Dr. D. A. MacGibbon and C. M. Hamilton, Winnipeg.

Assistant commissioners: F. J. Rathbone, Fort William; Professor T. J. Harrison, Winnipeg; R. S. Dundas, Saskatoon; W. H. Blatchford, Calgary.

Secretary, J. Rayner, Winnipeg.

Chief inspector, F. S. Ludlam.

Inspectors: W. Closs, Fort William; J. A. Ross, Vancouver; P. J. Marples, Montreal; W. Taft, Calgary; W. A. McBeath, Moose Jaw; W. Millar, Saskatoon; B. Corbett, Edmonton, and D. A. Benson, Toronto.

Chief weighmaster, S. M. Capon, Fort William.

Chemist, Dr. J. A. Anderson.

Statistician, E. A. Ursell, Fort William.

Warehouseman, C. F. Spittle, Winnipeg.

Registrar: W. T. Todd, Winnipeg; deputies, R. C. Deakin, Montreal, H. E. James, Vancouver.

Canadian Mill Wages

Rates of wages per hour prevailing in Canadian flour mills in 1941, in cents:

Millwrights	70@85
Electricians	60@70
Bolters and grinders	55@75
Packers	45@55
Elevator help	40@50
General help	40@50
Watchmen	30@40

UNITED STATES CENSUS REPORTS ON THE FLOUR MILLING INDUSTRY

This industry embraces establishments engaged primarily in the manufacture of flour, meal and feed from wheat, corn and other grains, including mills whose chief products are cracked and ground grain for stock and poultry feed, but not including establishments using such grain and other materials in the preparation of mixed feeds. Other mills whose principal products are the result of further manufacturing processes are classified elsewhere. For example, those making cereal breakfast foods are classified in the cereal preparations industry. Although some manufacturers of cereal preparations and prepared feeds purchase certain grain mill products and put them through further manufacturing processes, others use grain as their basic raw material and perform all the processes necessary to convert it into the finished product. The flour and other grain mill products industry does not, therefore, as defined by the United States Census Bureau, embrace all the mills that use grain as material. The manufactures census is restricted to merchant mills—that is, establishments that mill purchased grain and sell the products made therefrom. Some mills report both merchant and custom business, but all such mills are treated as merchant mills, even though their custom work constitutes more than half their total business. Establishments producing goods valued at less than $5,000 are also omitted from the census.

SUMMARY FOR THE UNITED STATES: 1899 TO 1939

Census year	No. of establishments	Wage earners (average for year)	Wages	Cost of materials, supplies, fuel, purchased electric energy, and contract work* ('000's omitted)	Value of products ('000's omitted)	Value added by manufacture†	Horsepower of prime movers
1939....	2,143	24,771	$28,369,796	$506,061,519	$649,943,088	$143,881,569	228,867
1937....	2,238	26,390	30,185,843	722,710,661	856,310,470	133,599,809	‡.....
1935....	2,193	26,495	27,104,722	716,222,181	853,219,061	136,996,880	¶.....
1933....	1,932	23,207	22,591,371	432,670,740	567,003,086	134,332,346	‡.....
1931....	2,412	22,840	27,298,079	461,090,593	598,040,724	136,950,131	‡.....
1929....	4,022	27,028	35,072,386	868,872,569	1,060,269,418	191,396,849	308,022
1927....	4,035	29,982	37,559,472	972,711,040	1,148,760,360	176,049,320	331,828
1925....	4,413	31,988	39,700,239	1,125,378,941	1,298,014,788	172,635,847	367,058
1923....	5,232	35,194	41,704,207	885,971,543	1,048,577,459	162,605,916	413,231
1921....	6,485	35,378	43,142,734	993,809,720	1,179,740,131	185,930,411	‡.....
1919....	10,708	45,481	50,888,383	1,799,180,987	2,052,434,385	253,253,398	611,967
1914....	10,788	39,718	24,593,162	752,270,021	877,679,709	125,409,688	708,965
1909....	11,691	39,453	21,464,386	767,576,479	883,584,405	116,007,926	800,383
1904....	10,051	39,110	19,822,196	619,971,161	713,033,395	93,062,234	758,755
1899....	9,476	32,226	16,285,163	428,116,757	501,396,304	73,279,547	666,513

*Figures for years prior to 1935 do not include cost of contract work. †Value of products less cost of materials, supplies, fuel, purchased electric energy, and contract work. See general explanations—value added by manufacture. ‡Not called for on schedule. ¶Data not available.

GENERAL STATISTICS FOR UNITED STATES

	1939	1937	1935	1933
Number of establishments	2,143	2,238	2,193	1,932
Proprietors and firm members	1,913	1,864	1,694	1,559
Salaried personnel, total†	5,548	6,587	7,310	*...
Salaried officers of corporations	1,131	971	1,242	*...
Manufacturing:				
Salaried employees	4,417	....	....	....
Distribution	4,895	....	....	....
Construction	387	....	....	....
Other	377	....	....	....
Salaries paid, total†	$12,517,968	$13,821,809	$14,754,951	*...
Salaries and wages, total	$49,374,893	$44,007,652	$41,859,673	*...
To salaried officers of corporations	$4,711,539	$4,166,064	$4,823,421	*...
To supervisory employees	$7,806,429	$4,123,958	*.....	$3,760,165
Wage earners (average for year)	24,771	26,390	26,495	23,207
Wages	$28,369,796	$30,185,843	$27,104,722	$22,591,371
Cost of materials, etc., total	$506,061,519	$722,710,661	‡$716,222,181	‡$432,670,740
Cost of materials, supplies and containers	$497,474,371	$714,205,750	$707,943,746	*...
Cost of fuel	$2,256,405	$2,592,497	$2,488,025	*...
Cost of purchased electric energy	$6,226,425	$5,874,706	$5,779,982	*...
Cost of contract work	$104,318	$37,708	$10,428	*...
Value of products	$649,943,088	$856,310,470	$853,219,061	$567,003,086
Value added by manufacture	$143,881,569	$133,599,809	$136,996,880	$134,332,346

*No data or data incomplete. †No data for employees of central administrative offices are included in the figures for any year. ‡Includes processing tax.

GENERAL STATISTICS FOR THE UNITED STATES IN DETAIL, BY STATES: 1939

	Number of establishments	Persons reported by manufacturing establishments	Cost of materials, etc.	Value of products	Value added by manufacture
United States—Total	2,143	35,978	506,061,519	649,943,088	143,881,569
Alabama	11	67	457,499	627,022	169,523
Arkansas	10	28	139,265	172,012	32,747
California	26	843	13,696,456	18,985,809	5,289,353
Colorado	38	611	5,235,756	6,916,494	1,680,738
Delaware	20	97	678,990	856,460	177,470
Georgia	39	447	4,044,439	4,942,527	898,088
Idaho	28	238	2,008,012	2,729,867	721,855
Illinois	58	2,250	31,999,229	42,765,720	10,766,491
Indiana	126	1,669	17,798,418	24,567,462	6,769,044
Iowa	25	388	7,821,202	10,021,474	2,200,272
Kansas	86	3,289	55,643,571	69,858,640	14,215,069
Kentucky	134	1,143	11,571,063	15,157,323	3,586,260
Maine	5	13	115,010	153,940	38,930
Maryland	53	280	2,785,175	3,554,194	769,019
Massachusetts	7	49	710,543	796,624	86,081
Michigan	74	936	9,848,262	12,686,185	2,837,923
Minnesota	62	2,943	53,835,109	67,437,432	13,602,323
Missouri	111	2,335	39,393,604	48,096,783	8,703,179
Montana	24	342	4,528,486	6,254,698	1,726,212
Nebraska	63	1,097	13,539,057	17,485,317	3,946,260
New Jersey	9	90	1,119,324	1,378,916	259,592
New Mexico	10	39	225,613	297,298	71,685
New York	44	2,631	58,207,845	75,590,791	17,382,946
North Carolina	118	1,015	10,069,563	12,261,290	2,191,727
North Dakota	19	382	3,996,546	5,303,788	1,307,242
Ohio	147	1,556	21,256,938	25,610,800	4,353,862
Oklahoma	40	1,397	16,727,117	23,023,319	6,296,202
Oregon	20	742	14,175,517	17,344,119	3,168,602
Pennsylvania	219	923	9,747,620	12,430,004	2,682,384
South Carolina	17	115	710,732	911,904	201,172
South Dakota	14	90	926,121	1,227,318	301,197
Tennessee	126	1,375	12,670,801	16,147,788	3,476,987
Texas	67	2,649	31,381,626	41,250,858	9,869,230
Utah	34	398	4,749,844	6,399,572	1,649,728
Virginia	155	957	11,537,507	14,338,259	2,800,752
Washington	26	1,336	18,979,321	25,018,207	6,038,386
West Virginia	32	246	1,877,550	2,461,944	584,394
Wisconsin	18	485	6,733,988	8,355,087	1,621,099
Wyoming	8	70	457,523	639,950	182,427
Other states	20	416	4,660,775	5,885,893	1,225,118

VALUE OF PRODUCTS FOR THE UNITED STATES: 1939, 1937 AND 1929

	1939	1937	1929
Flour and other grain-mill products industry, all products, total value	$649,943,088	$856,310,470	$1,060,269,418
Flour, meal, feed, etc.	592,760,885	786,651,625	995,910,661
Miscellaneous products, not specified	3,737,665	68,990,589	64,358,757
Other products (not classified in this industry)	*43,731,197		
Merchandise (goods bought and sold without processing)	8,918,499		
Receipts for contract work	794,842	668,256	
Flour meal, feed, etc., total value	634,348,050	838,706,561	1,040,185,248
Made in the industry	592,760,885	786,651,625	995,910,661
Made as secondary products in other industries	41,587,165	52,054,936	44,274,587

*Value of corn grits and hominy for human consumption, cereal breakfast foods, and prepared feeds for animals and fowls, including dog and cat food.

PRODUCTS, BY KIND, QUANTITY AND VALUE FOR THE UNITED STATES 1939, 1937 AND 1929

Product—	1939 Produced in the industry	1939 Produced in other industries	1939 Total	1937	1929
Flour, meal, feed, etc., total value	$592,760,885	$41,587,165	$634,348,050	$838,706,561	$1,040,185,248
Wheat and prepared flours—					
Total barrels	*110,536,801	831,926	*111,368,727	105,273,951	120,094,451
Total value	$455,039,488	$3,316,835	$458,356,323	$617,024,692	$737,308,563
White flour, for sale as such—Barrels	95,167,415	723,771	95,891,186		
Value	$385,602,183	$2,841,442	$388,443,625		
Blended, phosphated, self-rising, and other prepared flours (made in this industry)†—					
Total barrels	9,896,692	.....	9,896,692		
Total value	$47,608,995	.....	$47,608,995		
Blended, plain—Barrels	402,995	.....	402,995		
Value	$1,657,410	.....	$1,657,410	$101,416,069	$115,773,234
Phosphated—Barrels	3,381,296	.....	3,381,296	$591,360,916	$711,997,506
Value	$14,351,017	.....	$14,351,017		
Self-rising—Barrels	5,394,454	.....	5,394,454		
Value	$24,895,496	.....	$24,895,496		
Other prepared flours (biscuit, cake, doughnut, pancake, etc.)—					
Barrels	717,947	.....	717,947		
Value	$6,705,072	.....	$6,705,072		
Semolina flour—Barrels	¶.....	¶.....	3,393,796	2,479,030	2,959,322
Value	¶.....	¶.....	$13,423,319	$17,529,631	$16,895,342
Graham and whole-wheat flour—Barrels	¶.....	¶.....	2,187,053	1,378,852	1,361,895
Value	¶.....	¶.....	$8,880,384	$8,134,145	$8,415,715
Rye flour—Barrels	1,424,467	6,229	1,430,696	1,424,015	1,678,822
Value	$4,063,972	$27,631	$4,091,603	$6,707,573	$9,179,272
Buckwheat flour—Pounds	19,801,049	2,838,563	22,639,612	26,550,235	38,452,929
Value	$554,212	$79,395	$633,607	$844,287	$1,569,923
Other flour, except corn flour (rice, soybean, etc.)—Pounds	18,142,102	17,900,604	36,042,706	13,120,438	21,090,575
Value	$461,909	$504,421	$966,330	$1,091,501	$781,708
Pearl barley—Pounds	5,681,237	14,699,977	20,381,214	‖.....	‖.....
Value	$171,408	$561,555	$732,963	‖.....	‖.....
Corn products (other than cereal preparations and corn grits and hominy for human consumption‖)—					
Flour—Barrels (200 lbs)	279,868	37,170	317,038	310,955	589,073
Value	$759,223	$149,209	$908,432	$1,573,106	$3,120,580
Meal—Barrels (200 lbs)	5,057,715	2,016,211	7,073,926	6,950,444	10,488,083
Value	$16,491,405	$7,104,722	$22,596,127	$32,642,130	$52,399,787
Corn grits and flakes for brewers' use—					
Tons (2,000 pounds)	188,271	13,490	201,761	195,037	‖.....
Value	$5,000,599	$409,589	$5,410,188	$9,458,302	‖.....
Other corn products—					
Pounds	¶.....	¶.....	5,482,916	‖.....	‖.....
Value	¶.....	¶.....	$80,833	‖.....	‖.....
Bran and middlings—					
Tons (2,000 pounds)	4,441,092	58,831	4,499,923	4,183,806	4,681,802
Value	$90,757,068	$1,138,936	$91,896,004	$116,434,273	$141,985,187
Feed,** screenings, etc.—					
Tons (2,000 pounds)	836,640	1,165,525	2,002,165	1,596,601	2,171,661
Value	$20,439,058	$28,236,582	$48,675,640	$52,930,697	$93,840,228

*Includes the duplication of a small amount (less than ⅛ of 1%) of wheat flour ground in certain mills and sold to other mills classified in this industry, for making blended and prepared flours. †For production in all industries, see report for "Blended and prepared flour made from purchased flour." ‡Detailed data on blended and other prepared flours not called for on the 1937 and 1929 schedules, as a result of which data for a considerable amount of such flours were included in the figures reported for "White flour." ¶Not shown separately to avoid disclosing approximations of data reported by individual establishments. ‖Not called for on schedule. §Data on production of these items will be found in the report on the "Cereal preparations" industry. **Not including prepared feeds, statistics for which will be found in the report for the "Prepared feeds (including mineral) for animals and fowls" industry.

Principal Grains Ground and Processed in the United States, by Kind, Quantity and Cost: 1939

	Quantity	Cost
Processed into flour—	bus	
Wheat	503,099,878	$376,437,669
Rye	6,553,408	3,254,511
Buckwheat	597,634	390,764
Processed into feeds for animal or fowl consumption—		
Wheat	3,933,338	2,879,746
Corn	29,322,405	16,939,837
Oats	8,717,015	3,118,724
Rye	1,149,592	512,454
Barley	5,404,200	2,719,748
Buckwheat	185,941	115,551
Processed into cereal breakfast preparations, wheat	976,045	786,133
Processed into meal, flour, hominy and grits for human consumption, and grits and flakes for brewers' use, corn	32,144,666	19,050,686
Processed or used for other purposes (including pearl barley):		
Corn	787,457	581,343
Barley	240,924	147,139
	Lbs	
Wheat and oats*	6,809,640	74,966

*Includes a small amount of oats used for cereal preparations.

Grain (Ground or Milled) and Other Materials Consumed, by Kind, Quantity and Cost, for the United States: 1939

	Quantity	Cost
	bus	
Wheat	508,053,667	$380,134,997
Corn	62,254,528	36,571,866
Oats	8,846,555	3,162,241
Rye	7,703,000	3,766,965
Barley	5,645,124	2,866,887
Buckwheat	783,575	506,315
Rice, other grains	959,553	573,720
Soybeans—	Lbs	
Whole beans	26,388,970	339,539
Bean oil cake	58,098,718	865,496
Sugar	189,599	8,051
	Gallons	
Blackstrap molasses	6,471,506	430,857
Flour—	Lbs	
Wheat	54,486,323	1,050,087
Corn	14,978,252	211,783
Buckwheat	5,590,796	159,736
Rice	1,347,231	37,896
Other	4,298,134	70,641
Phosphate	21,940,978	1,595,704
Soda	15,361,336	312,547
Salt	22,245,455	224,552
Seasonings, shortening and enriching materials		8,725,856 625,668

PRINCIPAL MILLING PRODUCTS IN THE UNITED STATES, BY KIND, QUANTITY AND VALUE, BY STATES: 1939

United States	Wheat flour and prepared flours Bbls †111,369	Value $458,356	Corn meal Bbls 7,074	Value 22,596	Rye flour Bbls 1,431	Value $4,092	Buckwheat flour Bbls 22,640	Value 633	Bran and middlings Tons 4,500	Value $91,896	Feed, screenings, etc. Tons 2,002	Value $48,676
Alabama	*..	*..	228	739	...	...	...	...	*..	*..	*..	*..
Arkansas	5	22	203	540	...	...	...	...	1	34	39	890
California	2,228	10,364	16	69	*..	*..	...	...	76	1,782	191	5,128
Colorado	1,362	4,972	*..	*..	*..	*..	...	...	51	841	45	990
Delaware	89	377	9	32	...	...	*..	*..	4	117	10	249
Florida	*..	*..	*..	*..	*..	*..	...	...	...	...	5	130
Georgia	414	1,959	305	981	*..	*..	...	...	16	375	14	365
Idaho	651	2,123	*..	*..	*..	*..	...	...	24	383	4	99
Illinois	6,097	27,890	496	1,246	*..	*..	*..	*..	235	4,818	121	2,242
Indiana	2,931	14,170	625	1,642	*..	*..	256	8	130	3,093	66	1,414
Iowa	2,177	8,387	*..	*..	2	6	28	1	90	2,630	*..	*..
Kansas	15,972	57,412	162	375	*..	*..	...	...	621	10,684	34	783
Kentucky	2,051	9,548	444	1,467	...	...	...	...	87	2,070	34	940
Louisiana	*..	*..	312	1,005	...	...	*..	*..	...	...	31	828
Maine	*..	*..	*..	*..	...	...	...	...	...	...	6	165
Maryland	536	2,088	22	82	...	...	226	7	23	573	29	810
Massachusetts	...	*..	*..	*..	...	...	...	...	...	...	61	1,779
Michigan	2,011	9,539	*..	*..	2	6	2,691	77	80	1,818	9	222
Minnesota	11,959	50,334	*..	*..	928	2,537	520	18	512	9,740	49	923
Mississippi	*..	*..	138	418	...	...	...	...	...	...	19	564
Missouri	10,133	38,147	594	2,005	*..	*..	*..	*..	410	7,980	83	2,103
Montana	1,402	5,462	...	...	*..	*..	...	...	52	728	2	44
Nebraska	3,162	12,719	112	313	3	15	*..	*..	140	2,774	14	307
New Jersey	*..	*..	*..	*..	*..	*..	*..	*..	*..	*..	37	995
New Mexico	47	214	*..	*..	...	...	...	...	2	46	1	15
New York	12,921	60,002	210	648	130	443	6,176	183	554	11,709	319	8,204
North Carolina	1,368	6,551	323	1,096	...	...	*..	*..	58	1,536	11	317
North Dakota	1,046	4,522	...	...	*..	*..	...	...	42	658	4	25
Ohio	4,698	17,202	339	1,323	*..	*..	536	14	199	4,499	94	2,421
Oklahoma	4,464	17,499	212	671	...	...	...	...	174	3,099	46	1,165
Oregon	3,558	14,235	*..	*..	...	...	...	...	125	2,382	35	918
Pennsylvania	1,529	6,149	53	200	7	28	5,468	142	69	1,726	94	2,487
South Carolina	140	553	61	184	...	...	...	...	15	156	*..	*..
South Dakota	222	805	*..	*..	*..	*..	*..	*..	10	220	*..	*..
Tennessee	2,109	10,008	693	2,250	*..	*..	...	...	96	2,480	26	662
Texas	6,459	27,311	623	2,078	*..	*..	...	...	256	5,913	116	2,933
Utah	1,302	4,786	*..	*..	...	...	...	...	40	689	5	118
Vermont	...	...	...	...	...	...	...	...	*..	*..	*..	*..
Virginia	2,061	9,034	275	932	*..	*..	211	6	87	2,244	19	516
Washington	5,080	18,016	*..	*..	6	27	*..	*..	175	3,062	51	1,369
West Virginia	170	808	106	367	...	...	381	9	7	176	16	506
Wisconsin	277	1,148	*..	*..	266	746	*..	*..	17	362	95	2,115
Wyoming	123	458	...	...	...	...	...	...	5	68	*..	*..
Other states	616	3,143	515	1,938	88	284	6,146	170	17	429	169	2,938

†Includes the duplication of data for a small amount (less than ½ of 1%) of wheat flour ground in certain mills and sold to other mills classified in this industry for making blended and prepared flours. *Included with other states.

UNITED STATES CENSUS DATA ON GRAIN GROUND, BY STATES

These tables cover all grain milled in the flour and other grain mill products industry. For wheat, corn and oats, statistics are presented for all states for which separate figures can be given without disclosing, exactly or approximately, the consumption of individual establishments. Certain of the "other states," however, reported larger quantities of the respective kinds of grain ground than some of the states shown separately.

1937

	Wheat	Corn	Oats	Rye	Barley
Alabama	.....	426,862	.....	.....	.....
Arkansas	21,552	.....	.....	.....	.....
California	11,523,868	1,739,173	513,949	.....	3,357,276
Delaware	285,057	325,179	.....	.....	.....
Georgia	1,750,872	1,402,434	.....	.....	.....
Idaho	2,853,467	.....	138,694	.....	.....
Illinois	23,085,532	3,102,513	.....	.....	.....
Indiana	13,438,115	5,473,880	140,483	.....	.....
Iowa	6,694,730	185,461	355,648	.....	.....
Kansas	69,601,132	747,703	194,364	.....	.....
Kentucky	8,178,022	2,388,901	209,673	.....	.....
Maine	.....	98,649	.....	.....	.....
Maryland	2,868,549	425,445	.....	.....	.....
Massachusetts	.....	912,422	196,535	.....	.....
Michigan	8,269,959	340,469	113,378	.....	.....
Minnesota	53,256,920	1,061,071	382,737	3,307,629	216,045
Missouri	39,987,509	2,838,309	331,507	.....	.....
Montana	5,421,859	.....	.....	.....	.....
Nebraska	15,449,955	1,271,706	416,325	.....	.....
New Jersey	836,397	.....	.....	.....	.....
New Mexico	189,295	.....	.....	.....	.....
New York	59,600,500	2,585,657	279,086	649,937	.....
North Carolina	5,924,881	1,352,215	.....	.....	.....
North Dakota	4,278,510	.....	.....	.....	.....
Ohio	19,667,760	1,306,350	296,225	.....	.....
Oklahoma	20,401,357	1,652,302	393,278	.....	.....
Oregon	12,814,815	.....	292,839	.....	164,969
Pennsylvania	8,362,251	1,855,065	295,849	.....	.....
South Carolina	450,220	336,335	.....	.....	.....
South Dakota	641,389	.....	.....	.....	.....
Tennessee	9,757,970	3,300,996	.....	.....	.....
Texas	32,583,041	5,188,427	2,925,303	.....	.....
Utah	5,729,553	.....	134,553	.....	296,536
Vermont	.....	90,704	113,000	.....	.....
Virginia	8,108,579	1,878,402	212,686	.....	.....
Washington	20,880,503	862,702	389,396	.....	290,268
West Virginia	947,007	885,877	.....	.....	.....
Wisconsin	2,453,878	529,356	.....	1,139,083	.....
Wyoming	422,193	.....	.....	.....	.....
Other states	9,131,638	4,047,841	2,350,204	1,710,538	1,461,683
United States	485,868,835	48,612,406	10,676,152	6,807,187	5,776,777

FLOUR OUTPUT OF UNITED STATES MILLS PRODUCING 100,000 BBLS OR MORE

This United States Census Bureau table covers mills in the grain mill products industry only and therefore does not include cereal or feed mills which produce wheat flour as a secondary product. These figures not compiled in 1933.

	1937 No. mills	Wheat ground, bus	Flour output, bbls	1935 No. mills	Wheat ground, bus	Flour output, bbls	1931 No. mills	Output
California	7	10,692,523	2,221,631	5	8,435,680	1,808,831	5	1,601,034
Illinois	8	17,972,540	3,782,940	10	18,228,735	4,108,614	9	4,561,937
Indiana	10	8,698,094	1,761,768	8	9,686,387	2,035,245	6	1,737,851
Iowa	4	6,287,564	1,345,642	4	6,033,779	1,305,938	4	1,441,935
Kansas	42	64,050,013	13,969,196	40	55,717,171	12,246,245	46	13,486,450
Kentucky	3	4,160,765	727,269	3	4,610,189	1,035,396	3	1,080,395
Michigan	*.	*.....	*.....	*.	*.....	*.....	4	1,180,247
Minnesota	26	50,895,170	10,722,357	24	53,746,765	11,566,261	28	16,572,523
Missouri	18	34,635,947	7,471,698	13	27,998,783	6,102,150	17	8,001,302
Montana	4	3,911,145	851,480	5	5,703,392	1,206,913	7	1,354,929
Nebraska	8	11,944,879	2,527,175	6	9,035,530	1,985,156	9	2,573,530
New York	9	57,396,876	12,239,953	10	53,915,032	11,929,408	11	12,258,238
North Carolina	*.	*.....	*.....	3	2,124,728	455,938	*.	*.....
Ohio	9	14,339,722	3,052,192	8	12,199,108	2,648,605	8	3,099,462
Oklahoma	10	16,223,305	3,404,427	12	15,904,218	3,524,128	12	3,367,317
Oregon	8	12,072,724	2,658,678	9	14,423,199	3,142,318	9	2,939,291
Pennsylvania	*.	*.....	*.....	3	2,174,374	416,599	3	369,269
Tennessee	5	5,576,983	1,090,438	5	4,793,205	1,062,111	6	1,176,793
Texas	19	29,655,343	6,180,980	21	26,445,498	5,765,177	19	5,299,604
Utah	3	4,848,489	996,078	3	4,031,101	896,351	3	1,093,009
Virginia	*.	*.....	*.....	*.	*.....	*.....	3	422,071
Washington	9	19,514,396	4,238,940	9	21,544,585	4,717,215	7	4,086,054
Other states	17	18,860,866	4,071,582	16	17,911,524	3,932,583	18	3,780,069
United States	219	391,737,344	83,314,424	217	374,662,983	81,991,182	237	91,482,810

*Included under other states.

Expenditures for Milling Plant and Equipment in the United States: 1939

Number of establishments—	
Total for the industry	2,143
Reporting expenditures for plant and equipment	1,183
Value of products—	
Total for the industry	$649,943,088
Reporting expenditures for plant and equipment	540,147,432
Expenditures for plant and equipment—	
Total for the industry	6,371,442
Expenditures for new construction or major alterations of buildings and other fixed plant and structures	2,523,483
Expenditures for new machinery and operating equipment	3,391,969
Expenditures for plant and equipment acquired in a "used" condition from other owners and expenditures for land	313,739
Expenditures unclassified	142,251

Prime Movers, Motors, Generators and Electric Energy in the United States Milling Industry: 1939 and 1929

	1939	1929
Number of establishments	2,143	4,022
Number of establishments reporting power equipment	2,123	4,022
Prime movers, aggregate—		
Number	2,172	3,521
Horsepower	228,867	308,022
Prime movers, driving generators, total—		
Number	388	*3,521
Horsepower	109,190	*308,022
Steam engines—Number	100	*822
Horsepower	30,348	*127,598
Steam turbines—Number	22	*45
Horsepower	23,772	*30,152
Diesel and semi-diesel engines—Number	137	
Horsepower	32,516	
Other internal combustion engines†—Number	38	*985 *57,447
Horsepower	4,547	
Hydroturbines and water wheels—Number	91	*1,669
Horsepower	17,507	*92,825
Prime movers, driving generators, ordinarily idle (included above), horsepower	14,749	
Prime movers not driving generators, total—Number	1,784	
Horsepower	119,677	
Steam engines—Number	244	‡...
Horsepower	39,048	
Steam turbines—Number	15	
Horsepower	665	
Diesel and semi-diesel engines—Number	522	
Horsepower	34,529	
Other internal combustion engines†—Number	313	
Horsepower	11,785	‡...
Hydroturbines and water wheels—Number	690	
Horsepower	33,650	
Prime movers not driving generators, ordinarily idle (included above), horsepower	88,921	
Generators, kilowatt rating, totals	60,328	45,083
Generators, driven by—		
Kilowatt rating—		
Steam engines	13,079	
Steam turbines	18,564	
Diesel and semi-diesel engines	17,592	‡...
Other internal combustion engines†	2,827	
Hydroturbines and water wheels	8,276	
Generators, ordinarily idle (included above), kilowatt rating	11,382	¶...
Electric motors, total—		
Number	20,054	14,328
Horsepower	386,051	366,835
Driven by purchased energy—Number	16,353	12,717
Horsepower	330,764	333,434
Driven by energy generated in establishments reporting—		
Number	3,701	1,611
Horsepower	55,287	33,401
Electric energy (kilowatt hours)—	1939	1929
Generated in plant	89,032,925	¶.....
Sold	9,729,044	‡.....
Purchased	598,339,945	531,215,721

*Includes data for prime movers not driving generators. †Gas, gasoline, etc. ‡Not called for on schedule. ¶Data not available.

Grain Ground or Milled, by Kind, Quantity and Cost, in the United States, by States: 1939

WHEAT

State—	Bus	Cost
Arkansas	23,229	$15,961
California	10,474,600	8,452,057
Colorado	6,186,015	3,966,441
Delaware	445,083	374,382
Georgia	2,027,115	1,857,679
Idaho	2,963,021	1,673,969
Illinois	27,261,488	20,556,073
Indiana	14,081,643	9,870,109
Iowa	8,620,273	6,869,815
Kansas	72,044,808	48,056,416
Kentucky	9,440,233	7,536,286
Maryland	2,541,698	2,007,731
Michigan	9,337,803	7,521,118
Minnesota	54,968,859	43,418,960
Missouri	45,294,315	33,524,883
Montana	6,350,762	3,969,432
Nebraska	14,553,508	10,207,383
New Mexico	227,991	178,063
New York	60,223,829	49,242,394
North Carolina	6,480,511	6,014,619
North Dakota	4,879,630	3,605,064
Ohio	22,234,071	16,945,192
Oklahoma	20,104,513	12,817,347
Oregon	15,658,868	11,756,407
Pennsylvania	7,440,280	6,151,028
South Carolina	553,049	448,497
South Dakota	1,005,441	699,873
Tennessee	9,651,984	8,376,836
Texas	29,352,364	23,041,825
Utah	5,932,528	3,654,575
Virginia	9,627,673	8,263,607
Washington	23,380,424	16,351,793
West Virginia	792,991	620,658
Wisconsin	1,300,091	1,023,232
Wyoming	558,580	323,404
Other states	2,034,396	1,741,888
United States	508,053,667	$380,134,997

CORN

Alabama	470,270	$342,140
Arkansas	189,506	102,304
California	1,508,188	1,105,510
Delaware	319,199	191,420
Georgia	1,816,975	1,199,871
Idaho	5,612	3,984
Illinois	10,611,000	5,823,614
Indiana	6,500,604	3,312,665
Iowa	165,725	78,397
Kansas	1,224,987	553,603
Kentucky	3,022,984	1,789,046
Maine	109,214	71,550
Maryland	527,605	313,799
Michigan	291,368	164,499
Minnesota	1,382,152	701,244
Missouri	2,062,756	1,053,745
Montana	3,315	2,034
Nebraska	796,031	372,248
New Jersey	260,581	136,217
New Mexico	31,058	19,000
North Carolina	2,223,651	1,471,384
North Dakota	17,432	7,970
Ohio	2,566,519	1,491,696
Oklahoma	1,282,249	791,815
Pennsylvania	2,213,013	1,449,117
South Carolina	250,511	146,072
South Dakota	53,761	24,370
Tennessee	2,958,574	2,025,175
Texas	4,350,861	2,687,430
Virginia	1,747,447	1,143,974
Washington	885,143	619,614
West Virginia	1,055,884	685,631
Other states	11,350,353	6,697,728
United States	62,254,528	$36,571,866

OATS

California	474,349	$217,634
Idaho	17,495	4,902
Illinois	111,837	43,788
Indiana	99,865	32,737
Kansas	198,891	62,002
Kentucky	91,087	36,301
Maryland	30,170	15,721
Michigan	120,452	40,507
Minnesota	713,872	206,242
Missouri	139,985	41,475
Montana	20,761	5,483
Nebraska	157,444	43,016
New York	156,582	59,728
North Carolina	176,694	65,674
North Dakota	13,725	3,716
Ohio	379,444	152,315
Oklahoma	531,144	221,975
Oregon	216,521	86,832
Pennsylvania	564,848	224,343
South Dakota	17,932	4,861
Texas	1,360,935	447,930
Utah	62,665	25,974
Virginia	156,101	60,926
Washington	444,608	197,673
West Virginia	86,783	32,937
Other states	2,495,365	828,549
United States	8,846,555	$3,162,241

(Continued on next page.)

RYE		
Kansas	2,559	$1,199
Michigan	31,547	16,654
Minnesota	4,201,843	1,951,780
Nebraska	26,024	10,787
New York	678,302	385,756
Ohio	18,656	11,963
Pennsylvania	33,084	20,138
Tennessee	2,700	1,720
Virginia	48,485	29,921
Washington	11,797	7,128
Wisconsin	2,177,545	1,042,591
Other states	470,458	287,328
United States	7,703,000	$3,766,965
BARLEY		
California	2,842,635	$1,517,270
Idaho	55,083	20,682
Kansas	21,479	9,380
Michigan	18,316	8,117
Minnesota	142,067	57,117
Missouri	87,721	38,300
Nebraska	31,773	12,280
Oklahoma	43,895	21,263
Oregon	229,758	132,740
Pennsylvania	46,252	23,439
Texas	90,589	40,916
Utah	174,949	82,817
Virginia	14,153	7,687
Washington	390,334	222,551
Wisconsin	84,968	36,817
Other states	1,371,153	635,510
United States	5,645,124	$2,866,887
BUCKWHEAT		
Indiana	25,241	$19,035
Maryland	10,066	9,456
Michigan	100,280	62,115
Minnesota	19,705	12,630
Nebraska	1,233	1,041
New York	206,196	124,603
Ohio	54,554	29,783
Pennsylvania	165,015	96,616
Virginia	9,017	6,443
West Virginia	1,903	8,518
Other states	180,365	136,075
United States	783,575	$506,315

UNITED STATES CENSUS SUMMARY OF MILLING STATISTICS BY STATES—1937

The following table gives detailed figures by states on employees, pay rolls, cost of materials and value of products for 1937:

	No. of establishments	Salaried officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, etc., fuel, purchased energy and contract work	Value of products	Value added by manufacture
Alabama	9	14	40	$29,092	$24,561	$585,516	$697,122	$111,606
Arkansas	6	3	10	*.....	5,855	377,017	456,975	79,958
California	24	313	698	642,319	1,051,997	21,290,534	26,524,789	5,234,255
Colorado	41	163	441	289,734	553,632	8,601,579	10,229,567	1,627,988
Delaware	16	17	70	19,388	60,405	717,823	852,104	134,281
Georgia	32	62	316	127,551	209,850	5,260,457	6,227,562	967,105
Idaho	29	61	150	124,334	175,764	3,225,730	4,084,699	858,969
Illinois	57	324	1,430	733,447	1,766,019	37,473,182	46,076,478	8,603,296
Indiana	135	360	1,222	796,137	1,335,201	25,400,199	30,350,853	4,950,654
Iowa	32	73	291	128,906	309,763	8,970,296	11,155,198	2,184,902
Kansas	96	679	2,431	1,645,683	2,861,417	84,459,394	98,994,751	14,535,357
Kentucky	148	161	832	265,771	679,387	13,692,917	16,626,290	2,933,373
Maine	8	..	13	.....	9,291	134,682	167,360	32,678
Maryland	71	68	260	108,108	219,283	4,302,090	4,999,796	697,706
Massachusetts	8	6	40	*.....	46,131	1,239,607	1,321,139	81,532
Michigan	86	150	645	295,824	672,912	12,420,606	14,907,118	2,486,512
Minnesota	65	396	2,373	1,009,113	3,341,897	82,838,023	97,017,761	14,179,738
Missouri	106	345	1,828	746,494	1,991,553	54,418,015	61,597,878	7,179,863
Montana	23	43	230	78,650	328,679	7,194,199	8,146,527	952,328
Nebraska	81	255	719	404,855	762,569	21,551,158	25,524,101	3,972,943
New Jersey	8	17	54	49,638	59,315	1,610,583	1,871,809	261,226
New Mexico	9	8	24	*.....	22,774	230,689	290,575	59,886
New York	55	386	2,022	882,851	3,135,265	89,112,556	102,813,647	13,701,091
N. Carolina	93	175	675	323,153	518,688	11,551,525	13,589,866	2,038,341
N. Dakota	17	88	278	175,218	337,165	6,285,475	7,478,539	1,193,064
Ohio	163	300	1,176	644,247	1,327,985	25,975,873	31,426,683	5,450,810
Oklahoma	42	238	934	544,003	1,002,682	27,960,495	33,119,822	5,159,327
Oregon	23	122	568	255,694	736,145	15,754,639	19,138,231	3,383,592
Pennsylvania	231	137	783	278,664	798,620	12,991,202	15,411,364	2,420,162
S. Carolina	9	14	73	23,136	44,762	904,560	1,045,486	140,926
S. Dakota	14	13	55	22,444	57,724	786,984	1,013,074	226,090
Tennessee	123	228	1,142	440,064	852,550	18,793,911	22,673,578	3,879,667
Texas	58	546	1,770	1,036,200	1,778,931	53,320,461	62,878,757	9,553,296
Utah	29	87	295	142,418	336,498	7,554,914	9,423,553	1,868,639
Vermont	4	7	16	*.....	14,089	141,410	206,663	65,253
Virginia	181	177	731	381,224	575,317	13,449,968	16,124,956	2,674,988
Washington	28	311	948	580,145	1,319,963	25,796,809	31,774,606	5,977,797
West Virginia	32	78	187	174,965	171,810	2,598,250	3,260,354	662,104
Wisconsin	19	69	284	154,392	294,685	6,982,992	8,155,595	1,172,602
Wyoming	7	13	38	26,625	49,294	586,014	841,887	255,873
Other states†	20	80	294	241,912	293,415	6,168,226	7,818,357	1,650,131
United States	2,238	6,587	26,390	$13,821,809	$30,185,843	$722,710,661	$856,310,470	$133,599,809

*Included in figures for "other states" to avoid disclosing, exactly or approximately, compensation of individual employees. †Arizona, six establishments; Connecticut, one; District of Columbia, one; Florida, one; Louisiana, two; Mississippi, four; Nevada, one; New Hampshire, one; Rhode Island, three.

UNITED STATES CENSUS REPORTS ON BLENDED AND PREPARED FLOUR MADE FROM PURCHASED FLOUR

GENERAL STATISTICS FOR THE UNITED STATES

Similar comparable data for 1937 for establishments engaged in blending purchased flours are not available, as the blending of flours was not treated as a manufacturing operation at the census for 1937.

(Because they account for a negligible portion of the national output, plants with annual production valued at less than $5,000 have been excluded since 1919.)

Total for industry—	1939	1937	Per cent of decrease (—)
Number of establishments	78		....
Salaried personnel*	176		....
Salaries*†	$407,261		....
Wage earners (average for the year)‡	706		....
Wages†‡	$593,196	(a)	....
Cost of materials, supplies, fuel and purchased electric energy, and contract work†	$13,965,965		....
Value of products†	$17,894,332		....
Value added by manufacture¶	$3,928,367		....

For footnotes, see footnotes above.

PREPARED FLOUR—	1939	1937	Per cent of decrease (—)
Number of establishments	30	41	(*)
Salaried personnel*	73	146	—50.0
Salaries*†	$190,343	$297,381	—36.0
Wage earners (average for the year)‡	337	408	—17.4
Wages†‡	$306,488	$372,711	—17.8
Cost of materials, supplies, fuel and purchased electric energy, and contract work†	$6,774,247	$9,724,861	—30.3
Value of products†	$8,610,485	$13,634,022	—36.8
Value added by manufacture¶	$1,836,238	$3,909,161	—53.0
BLENDED FLOUR—			
Number of establishments	48		....
Salaried personnel*	103		....
Salaries*†	$216,918		....
Wage earners (average for the year)‡	369		....
Wages†‡	$286,708	(a)	....
Cost of materials, supplies fuel and purchased electric energy, and contract work†	$7,191,718		....
Value of products†	$9,283,847		....
Value added by manufacture¶	$2,092,129		....

(a) No comparable data. (*) Per cent not computed where base is less than 100. *No data for employees of central administrative offices are included. †Profits or losses cannot be calculated from the census figures because no data are collected for certain expense items, such as interest, rent, depreciation, taxes, insurance and advertising. ‡The item for wage earners is an average of the numbers reported for the several months of the year and includes both full-time and part-time workers. The quotient obtained by dividing the amount of wages by the average number of wage earners should not, therefore, be accepted as representing the average wage received by full-time wage earners. ¶Value of products less cost of materials, supplies, fuel, purchased electric energy, and contract work.

PRODUCTION OF BLENDED AND PREPARED FLOURS IN THE UNITED STATES, BY KIND, QUANTITY AND VALUE: 1939

(Comparable data for 1937 not available)

	Value
"Blended and prepared flour made from purchased flour" industry, all products, total value	$17,894,332
Blended, phosphated, self-rising and other prepared flours	14,819,684
Miscellaneous products	1,448,113
Other products (not classified in this industry)*	1,155,247
Merchandising (goods bought and sold without processing)	471,288
Blended and prepared flour, total value	$75,596,352
Blended and prepared flour made in industry	14,819,684
Blended and prepared flour, made as secondary products in other industries	60,776,668

		Made in the—		
		Blended and prepared flour industry (made from purchased flour)	Flour and other grain-mill products industry	Other industries
Total production—Pounds	2,584,427,690	440,860,731	1,939,751,630	203,815,329
Value	$75,596,352	$14,819,684	$47,608,995	$13,167,673
Blended, plain—Pounds	142,499,209	60,100,956	78,987,056	3,411,197
Value	$3,220,955	$1,482,345	$1,657,410	$81,200
Phosphated—Pounds	726,974,545	53,387,405	662,734,124	10,853,016
Value	$15,942,608	$1,318,648	$14,351,017	$272,943
Self-rising†—Pounds	1,328,260,960	227,146,357	1,057,312,912	43,801,691
Value	$32,080,551	$5,571,751	$24,895,496	$1,613,304
Other prepared flours‡—				
Pounds	386,692,976	100,226,013	140,717,538	145,749,425
Value	$24,352,238	$6,446,940	$6,705,072	$11,200,226

*Prepared feeds for animals, corn meal, cereal preparations, grain offal. †The figures for "prepared flour (self-rising)" as reported for 1937 were 888,514,180 pounds, valued at $38,056,016. ‡Biscuit, cake, doughnut, pancake, etc.

Principal Blended Products in the United States, by Kind, Quantity and Value, by States, and by Groups of States: 1939

Statistics are given for each state which can be shown separately without disclosing data for individual establishments, and for the remaining states in groups. Certain of the states for which figures are given in combination with those for others, however, reported larger quantities and values of the specified classes of products than some of the states shown separately.

SELF-RISING FLOUR

States—	Pounds	Value
Alabama	$32,646,666	$837,474
Georgia	103,904,446	2,565,253
Illinois	78,212,322	1,909,741
Indiana	15,949,599	543,656
Iowa	99,775	4,898
Kansas	65,054,431	1,295,473
Kentucky	100,162,625	2,511,918
Louisiana	831,131	26,794
Michigan	19,242,878	490,303
Mississippi	22,879,850	556,661
Missouri	81,696,813	1,640,745
Nebraska	368,453	10,577
North Carolina	182,252,917	4,489,036
Ohio	9,483,034	191,309
Oklahoma	52,382,827	1,126,485
Pennsylvania	5,860,465	180,576
South Carolina	40,269,595	947,042
Tennessee	243,098,173	5,927,552
Texas	12,582,666	266,366
Utah	9,060,908	143,546
Virginia	165,749,628	3,714,386
West Virginia	265,856	7,290
Other states*	86,205,902	2,693,470
United States	1,328,260,960	$32,080,551

PHOSPHATED FLOUR

	Pounds	Value
Georgia	16,393,745	$413,937
Illinois	26,190,043	577,244
Indiana	27,807,673	604,882
Kansas	63,182,261	1,249,176
Kentucky	84,443,926	2,041,722
Michigan	684,936	15,929
Mississippi	17,016,622	427,514
Missouri	73,221,559	1,234,690
North Carolina	27,470,098	638,792
Ohio	11,946,280	262,965
Oklahoma	124,319,540	2,648,614
Tennessee	95,909,039	2,329,123
Texas	77,322,136	1,701,710
Virginia	57,020,545	1,313,592
Other states†	24,037,142	482,718
United States	726,974,545	$15,942,608

PLAIN BLENDED FLOUR

Groups of states:	Pounds	Value
Ala., Ky., La., Miss., Tenn.	36,585,270	$1,025,211
D. C., Ga., Md., N. C., S. C., Va.	26,222,226	613,486
Ill., Ind., Iowa, Mich., Ohio, Wis.	17,062,246	385,424
Other states (Calif., Del., Mo., N. Y., Pa., Tex., Utah, Wash.)	62,629,467	1,196,834
United States	142,499,209	$3,220,955

OTHER PREPARED FLOURS

	Pounds	Value
California	23,325,546	$1,191,080
Illinois	104,807,577	6,237,836
Indiana	8,348,803	533,206
Massachusetts	334,208	33,216
Michigan	30,542,905	1,584,629
Missouri	15,424,691	1,258,707
Nebraska	9,260,960	372,649
New York	42,526,518	3,444,569
Utah	988,425	41,115
Washington	8,385,955	439,315
Other states‡	142,747,388	9,215,916
United States	386,692,976	$24,352,238

*Arkansas, California, Colorado, Delaware, District of Columbia, Florida, Idaho, Maryland, Massachusetts, New York, South Dakota, Washington and Wisconsin. †Alabama, Arkansas, Idaho, Louisiana, Maryland, Nebraska, New York, Pennsylvania, South Carolina, Utah, Washington and Wisconsin. ‡Arizona, Colorado, District of Columbia, Idaho, Iowa, Kansas, Kentucky, Louisiana, Maryland, Minnesota, Montana, New Jersey, North Carolina, Ohio, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Virginia, West Virginia, Wisconsin and Wyoming.

Expenditures for Plant and Equipment in Blended Flour Industry in the United States: 1939

Number of establishments—	
Total for the industry	78
Reporting expenditures for plant and equipment	39
Value of products—	
Total for the industry	$17,894,332
Reporting expenditures for plant and equipment	12,111,842
Expenditures for plant and equipment—	
Total for the industry	154,487
Expenditures for new construction or major alterations of buildings and other fixed plant and structures	39,225
Expenditures for new machinery and operating equipment	109,143
Expenditures for plant and equipment acquired in a "used" condition from other owners and expenditures for land	6,119

Prime Movers, Motors and Electric Energy in Blended Flour Industry in the United States: 1939*

Number of establishments	78
Number of establishments reporting power equipment	78
Prime movers not driving generators, total:	
Number	8
Horsepower	525
Steam engines—Number	1
Horsepower	50
Diesel and semi-diesel engines—	
Number	3
Horsepower	255
Other internal combustion engines†—Number	3
Horsepower	195
Hydroturbines and water wheels—	
Number	1
Horsepower	25
Electric motors driven by purchased energy—Number	633
Horsepower	3,912
Electric energy purchased (kilowatt hours)	2,305,285

*Comparative data for 1929 not available. †Gas, gasoline, etc.

Flour Sack Dimensions

In a booklet on conversion factors, C. G. Harrel, of the Pillsbury Flour Mills Co., Minneapolis, reports the following dimensions of the most common flour containers:

The 49-lb cotton bag has a volume of 1,830 cubic inches, and its flat size when empty is 33.5x16.5 inches. The weight per 1,000 empty bags is 200 lbs. Ten sacks of this size, when filled, will occupy 11.87 cubic feet.

The 98-lb cotton bag has a volume of 3,330 cubic inches, and its flat size when empty is 35.5x20.5 inches. Weight per 1,000 empty bags is 309 lbs. Ten sacks of this size, when filled, will occupy 23.75 cubic feet.

The 140-lb jute bag has a volume of 4,870 cubic inches and its flat size when empty is 39x23.5 inches. Weight per 1,000 empty bags is 900 lbs. Ten sacks of this size, when filled, will occupy 33.93 cubic feet.

The 100-lb grain bag has a volume of 3,900 cubic inches and its flat size when empty is 42x20 inches. Weight per 1,000 empty bags is 937 lbs. Ten sacks of this size, when filled, will occupy 24.24 cubic feet.

United States Seed Act

The Federal Seed Act, which supersedes the Federal Seed Act of 1912 (amended 1916 and 1926) became effective Feb. 5, 1940, and is under the administration of the Agricultural Marketing Service of the United States Department of Agriculture. The new law controls the quality of all imported agricultural seeds and vegetable seeds, and restricts the importation of screenings and seeds containing noxious weed seeds. This statute makes it unlawful to ship in interstate commerce agricultural seeds that are falsely labeled, and requires affirmative labeling to show germination and purity as well as the name and address of shipper or consignee, with shipper's code designation.

UNITED STATES CENSUS REPORTS ON CEREAL PREPARATIONS

This industry embraces establishments engaged primarily in the manufacture, from wheat, oats, corn and other grains, of "breakfast foods," coffee substitutes, prepared flour (self-rising), flakes and grits for brewers' use, and similar preparations. The quantity of prepared flour made as a secondary product by mills classified in the flour and other grain mill products industry exceeds that made as a primary product in the cereal preparations industry.

GENERAL STATISTICS FOR THE UNITED STATES

(Because they account for a negligible portion of the national output, plants with annual production valued at less than $5,000 have been excluded since 1919.)

	1939	1937	Per cent of decrease (—)
Number of establishments	70	71	(*)
Proprietors and firm members	28	.....	....
Persons reported by manufacturing establishments, total	9,033	.....	....
Salaried personnel†	1,011	1,029	—1.7
Salaries†‡	$2,779,590	$2,788,846	—0.3
Wage earners (average for the year)‖	7,458	7,725	—3.5
Wages‖	$9,856,767	$10,419,454	—5.4
Cost of materials, supplies, fuel, purchased electric energy, and contract work†§	$58,033,097	$85,180,851	—31.9
Materials, supplies and containers	$56,156,793	.....	....
Fuel	995,859	.....	....
Purchased electric energy	881,345	.....	....
Value of products†	$128,382,565	$150,861,177	—20.9
Value added by manufacture§	$70,348,568	$65,680,326	—6.6

*Per cent not computed where base is less than 100. †No data for employees of central administrative offices are included. ‡Profits or losses cannot be calculated from the census figures because no data are collected for certain expense items, such as interest, rent, depreciation, taxes, insurance, and advertising. ‖The item for wage earners is an average of the numbers reported for the several months of the year and includes both full-time and part-time workers. The quotient obtained by dividing the amount of wages by the average number of wage earners should not, therefore, be accepted as representing the average wage received by full-time wage earners. §Value of products less cost of materials, supplies, fuel, purchased electric energy, and contract work.

CEREAL PRODUCTS, BY KIND, QUANTITY AND VALUE, FOR THE UNITED STATES: 1939 AND 1937

Product—	1939 Produced in the industry	1939 Produced in other industries	1939 Total	1937
Total value	$101,449,479	$10,528,251	$111,977,730	$119,736,037
Breakfast foods—Total pounds	1,126,234,772	162,381,066	1,288,615,838	1,215,744,792
Total value	$96,633,694	$6,837,895	$103,471,589	$111,215,499
Ready to serve—Pounds	566,057,099	10,436,220	576,493,319	535,542,948
Value	$65,822,535	$1,242,546	$67,065,081	$72,906,120
To be cooked before serving—Pounds	560,177,673	151,944,846	712,122,519	680,201,844
Value	$30,811,159	$5,595,349	$36,406,508	$38,309,379
Made from wheat—Total pounds	373,143,663	79,848,130	452,991,793	446,494,911
Total value	$44,680,756	$3,447,636	$48,128,392	$52,412,368
Ready to serve—Pounds	295,412,996	4,126,209	299,539,205	297,333,882
Value	$37,315,637	$349,602	$37,665,239	$40,834,093
To be cooked before serving—Pounds	77,730,667	75,721,921	153,452,588	149,161,029
Value	$7,365,119	$3,098,034	$10,463,153	$11,578,275
Made from oats and corn—Total pounds	700,367,004	79,594,486	779,961,490	713,501,275
Total value	$43,271,338	$2,801,290	$46,072,628	$49,352,273
Oats—Pounds	471,935,109	57,737,290	529,672,399	505,895,522
Value	$22,902,045	$1,930,531	$24,832,576	$25,246,305
Corn—Pounds	228,431,895	21,857,196	250,289,091	207,605,753
Value	$20,369,293	$870,759	$21,240,052	$24,105,968
Oats and corn*—Ready to serve—Pounds	*.....	*.....	231,095,091	205,597,645
Value	*.....	*.....	$20,637,042	$23,995,281
To be cooked before serving—Pounds	*.....	*.....	548,866,399	507,903,630
Value	*.....	*.....	$25,435,586	$25,356,992
Made from other grains and from mixed grains—Total pounds	52,724,105	2,938,450	55,662,555	55,748,606
Total value	$8,681,600	$588,969	$9,270,569	$9,450,858
Ready to serve—Pounds	*.....	*.....	45,859,023	32,611,421
Value	*.....	*.....	$8,762,800	$8,076,746
To be cooked before serving—Pounds	*.....	*.....	9,803,532	23,137,185
Value	*.....	*.....	$507,769	$1,374,112
Corn grits and hominy for human consumption—Pounds	*.....	*.....	227,477,645	155,953,277
Value	*.....	*.....	$3,520,260	$3,870,186
Other cereal preparations, including coffee substitutes, value	*.....	*.....	$4,985,881	$4,650,352

*Figures withheld to avoid disclosing, exactly or approximately, data reported by individual establishments.

PRINCIPAL CEREAL PRODUCTS IN THE UNITED STATES, BY KIND, QUANTITY AND VALUE, BY GROUPS OF STATES: 1939

BREAKFAST FOODS MADE FROM WHEAT

	Pounds	Value
United States	252,991,793	$48,128,392
Groups of states:		
Arizona, Colorado, Idaho, Montana, Nevada, Utah, Wyoming	1,330,302	39,596
California, Oregon, Washington	25,808,063	2,944,963
Illinois, Indiana, Michigan, Ohio, Wisconsin	229,350,407	25,167,112
Iowa, Kansas, Minnesota, Missouri, Nebraska, N. Dak., S. Dak.	100,089,992	9,275,819
New Jersey, New York, Pennsylvania	89,073,960	10,290,083
Other states (Ga., Md., Mass., N. C., Okla., Tenn., Texas, Vt.)	7,339,069	410,819

BREAKFAST FOODS MADE FROM CORN AND OATS

	Pounds	Value
United States	779,961,490	$46,072,628
Groups of states:		
California, Oregon, Washington	45,938,851	1,759,119
Illinois, Indiana, Michigan, Ohio, Wisconsin	343,382,414	25,072,587
Iowa, Minnesota, Missouri, Nebraska, North Dakota	358,635,728	17,378,433
New York, Pennsylvania	26,280,497	1,722,187
Other states (Massachusetts, Montana, Texas, Tennessee, Utah)	5,724,000	140,302

BREAKFAST FOODS MADE FROM OTHER GRAINS AND FROM MIXED GRAINS

	Pounds	Value
United States (Calif., Ill., Ind., Iowa, Kansas, La., Md., Mich., Minn., Mo., Nebraska, N. Dak., Ohio, Oregon, Pa., Texas, Wash.)	55,662,555	$9,270,569

CORN GRITS AND HOMINY FOR HUMAN CONSUMPTION

	Pounds	Value
United States	227,477,645	$3,520,260
Groups of states:		
Alabama, Kentucky, Mississippi, Tennessee	38,761,716	673,322
Illinois, Indiana, Wisconsin	154,119,887	2,228,172
Iowa, Minnesota, Missouri, Nebraska	8,936,140	148,546
Other states (Florida, Georgia, Louisiana, Maine, Maryland, New York, N. Carolina, S. Carolina, Texas, Virginia, W. Virginia)	25,659,902	470,220

VALUE OF CEREAL PRODUCTS FOR THE UNITED STATES: 1939 AND 1937

Cereal preparations industry, all products, total value	$128,382,565	$150,861,177
Cereal preparations and corn grits for food	101,449,479	109,807,261
Miscellaneous products	*1,014,908	4,982,991
Other products (not classified in this industry)	†25,918,178	36,070,925
Cereal preparations, etc., total value	111,977,730	119,736,037
Cereal preparations, etc., made in the industry	101,449,479	109,807,261
Cereal preparations, etc., made as secondary products in other industries	10,528,251	9,928,776

*Includes small amount of merchandise (goods bought and sold without processing) and receipts for contract work. †Value of flour, corn meal, corn grits and flakes for brewers' use, pearl barley, grain offals and prepared feeds for animals and fowls, including dog and cat food.

EXPENDITURES FOR CEREAL PLANT AND EQUIPMENT IN UNITED STATES: 1939

Number of establishments—Total for the industry	70
Reporting expenditures for plant and equipment	37
Value of products—Total for the industry	$128,382,565
Reporting expenditures for plant and equipment	116,060,960
Expenditures for plant and equipment—Total for the industry	2,095,247
Expenditures for new construction or major alterations of buildings and other fixed plant and structures	182,796
Expenditures for new machinery and operating equipment	1,903,203
Expenditures for plant and equipment acquired in a "used" condition from other owners and expenditures for land	9,248

Prime Movers, Motors, Generators and Electric Energy in the Cereal Industry in the United States—1939*

Number of establishments	70
Number of establishments reporting power equipment	69
Prime movers, aggregate—Number	32
Horsepower	16,551
Prime movers, driving generators, total—Number	14
Horsepower	15,461
Steam engines—Number	3
Horsepower	2,157
Steam turbines—Number	6
Horsepower	12,679
Diesel and semi-diesel engines—Number	3
Horsepower	450
Other internal combustion engines†—Number	2
Horsepower	175
Prime movers not driving generators, total—Number	18
Horsepower	1,090
Steam engines—Number	9
Horsepower	539
Steam turbines—Number	8
Horsepower	521
Hydroturbines and water wheels—Number	1
Horsepower	30
Prime movers not driving generators, ordinarily idle (included above), horsepower	116
Generators, kilowatt rating, total	10,858
Generators, driven by—Steam engines, kilowatt rating	1,438
Steam turbines, kilowatt rating	9,125
Diesel and semi-diesel engines, kilowatt rating	165
Other internal combustion engines†, kilowatt rating	130
Electric motors, total—Number	9,856
Horsepower	79,731
Driven by purchased energy—Number	7,411
Horsepower	60,508
Driven by energy generated in establishments reporting—Number	2,445
Horsepower	19,223
Electric energy (kilowatt hours)—Generated in plant	27,580,823
Sold	1,752,670
Purchased	91,478,344

*Comparable data for 1929 not available. †Gas, gasoline, etc.

UNITED STATES CENSUS REPORTS ON THE MACARONI INDUSTRY

The establishments in this industry are engaged primarily in the manufacture of macaroni, spaghetti, vermicelli, noodles and other alimentary pastes.

SUMMARY FOR THE UNITED STATES: 1914 TO 1939

Census year	No. of establishments	Wage earners (average for year)	Wages	Cost of materials, supplies, fuel, purchased electric energy, and contract work*	Value of products	Value added by manufacture†	Horsepower of prime movers
1939	322	6,013	$5,383,421	$26,929,121	$46,153,471	$19,224,350	2,011
1937	319	6,452	5,719,299	32,836,492	50,358,752	17,522,260	§..
1935	336	6,005	5,306,226	31,811,433	47,598,554	15,787,121	†..
1933	296	5,492	4,264,619	20,385,288	35,891,909	15,506,621	§..
1931	309	4,764	4,474,196	20,311,386	36,224,902	15,913,516	§..
1929	353	5,072	5,384,353	27,336,126	47,074,230	19,738,104	4,233
1927	353	4,587	5,070,936	27,433,792	45,353,200	17,919,408	4,462
1925	327	4,560	5,025,625	27,491,142	43,489,344	15,998,202	4,903
1923	343	4,098	4,332,312	16,646,400	29,556,501	12,910,101	†..
1921	409	3,865	3,748,643	19,964,054	31,012,787	11,048,733	§..
1919	567	4,543	4,168,009	25,109,951	37,057,198	11,947,247	6,336
1914‡	373	3,534	1,637,760	7,938,181	12,883,579	4,945,398	†..

*Figures for years prior to 1935 do not include cost of contract work. ‖Value of products less cost of materials, supplies, fuel, purchased electric energy, and contract work. §Not called for on schedule. †Data not available. ‡No comparable data are available for years prior to 1914.

GENERAL STATISTICS FOR THE UNITED STATES

	1939	1937	1935	1933
Number of establishments	328	319	336	296
Proprietors and firm members	311	297	311	281
Persons reported by manufacturing establishments, total	8,140	7,436	6,979	6,155
Salaried officers of corporations	285	260	305	*..
Manufacturing—Salaried employees	519	724	669	663
Wage earners	6,013	6,452	6,005	5,492
Distribution	1,126	*..	*..	*..
Construction	23	*..	*..	*..
Other	174	*..	*..	*..
Salaries and wages, total	$9,351,893	$7,668,789	$7,271,185	*..
To salaried officers of corporations	$1,217,386	$832,814	$1,015,971	*..
Manufacturing—To salaried employees	$774,795	$1,116,676	$948,988	$1,010,785
To wage earners	$5,383,421	$5,719,299	$5,306,226	$4,264,619
Distribution	$1,739,332	*..	*..	*..
Construction	$60,388	*..	*..	*..
Others	$176,971	*..	*..	*..
Cost of materials, supplies, etc.	$26,929,121	$26,929,121	$31,811,433	$20,385,288
Cost of materials, supplies and containers	$25,764,918	$31,712,746	$30,756,011	*..
Fuel	$302,661	$330,470	$301,063	*..
Purchased energy	$797,445	$780,368	$742,917	*..
Contract work	$64,097	$12,908	$11,436	*..
Value of products	$46,153,471	$50,358,752	$47,598,554	$35,891,909
Value added by manufacture	$19,224,350	$17,522,260	$15,787,121	$15,506,621

*No data or incomplete data. †No data for employees of central administrative offices are included in the figures for any year. ‖Profits or losses cannot be calculated from the census figures because no data are collected for certain expense items, such as interest, rent, depreciation, taxes, insurance, and advertising. §The item for wage earners is an average of the numbers reported for the several months of the year and includes both full-time and part-time workers. The quotient obtained by dividing the amount of wages by the average number of wage earners should not, therefore, be accepted as representing the average wage received by full-time wage earners. ‡Value of products less cost of materials, supplies, fuel, purchased electric energy, and contract work.

VALUE OF MACARONI PRODUCTS FOR THE UNITED STATES: 1939, 1937 AND 1929

	1939	1937	1929
Macaroni, spaghetti, vermicelli and noodles industry, all products, total value	$46,153,471	$50,358,752	$47,074,230
Macaroni, spaghetti, vermicelli and noodles	$45,304,282	*$49,285,651	*$45,912,265
Miscellaneous products and receipts for contract work	$92,506		
Other products not classified in this industry)	†$756,683	*$1,073,101	*$1,161,965
Macaroni, spaghetti, vermicelli and noodles, total value	$45,867,242	$50,148,358	$46,871,883
Macaroni, spaghetti, vermicelli and noodles made in the industry	$45,304,282	*$49,285,651	*$45,912,265
Macaroni, spaghetti, vermicelli and noodles made as secondary products in other industries	$562,960	$862,707	$959,618

*Revised. †Value of bakery products, ravioli and confectionery.

MACARONI PRODUCTS, BY KIND, QUANTITY AND VALUE, FOR THE UNITED STATES: 1939, 1937 AND 1929

Products—	1939 Produced in the industry	1939 Produced in other industries	1939 Total	1937	1929
Macaroni, spaghetti, vermicelli and noodles, total value	$45,304,282	$562,960	$45,867,242	$50,148,358	$46,871,883
Macaroni, spaghetti and vermicelli—Pounds	568,061,651	3,961,959	572,023,610	556,870,102	182,862,400
Value	$34,910,216	$272,042	$35,182,258	$38,993,987	$37,424,762
Egg noodles and other egg products—Pounds	99,704,493	1,896,735	101,601,228	94,581,298	55,019,212
Value	$9,707,555	$247,471	$9,955,026	$10,602,472	$8,196,195
Noodles, plain or water—					
Pounds	10,345,059	420,351	10,765,410	6,832,085	15,313,757
Value	$686,511	$43,447	$729,958	$551,899	$1,250,926

Principal Macaroni Products, by Kind, Quantity and Value, in the United States, by States: 1939

MACARONI, SPAGHETTI AND VERMICELLI

	Pounds	Value
California	35,383,325	$2,334,141
Connecticut	9,105,997	475,574
Illinois	69,061,714	4,085,297
Louisiana	16,950,872	847,624
Massachusetts	14,156,301	977,424
Michigan	13,072,350	793,341
Minnesota	12,340,677	748,598
Missouri	23,284,750	1,239,767
New York	173,245,800	11,315,513
Ohio	8,127,147	446,081
Pennsylvania	71,785,435	3,819,541
Rhode Island	6,642,300	356,194
Texas	5,652,596	331,922
Washington	8,074,347	481,302
Other states*	105,139,999	6,929,939
United States	572,023,610	$35,182,258

EGG NOODLES AND OTHER EGG PRODUCTS

California	5,859,983	$628,077
Illinois	23,612,056	2,169,944
Louisiana	749,884	64,723
Massachusetts	1,583,934	139,039
Michigan	1,029,051	94,867
Minnesota	1,738,731	177,486
Missouri	4,488,920	330,643
New York	24,894,574	2,500,245
Ohio	4,040,759	434,757
Pennsylvania	13,239,336	1,298,082
Washington	994,411	115,356
Other states†	19,369,589	2,001,807
United States	101,601,228	$9,955,026

NOODLES, PLAIN OR WATER

California	2,385,519	$169,625
New York	3,466,033	203,409
Pennsylvania	527,825	40,475
Washington	495,030	35,313
Other states‡	3,891,003	281,136
United States	10,765,410	$729,958

*Colorado, District of Columbia, Florida, Indiana, Iowa, Kansas, Kentucky, Maryland, Nebraska, New Jersey, Oklahoma, Oregon, Tennessee, Utah, Vermont, Wisconsin.

†Arkansas, Colorado, Connecticut, Delaware, District of Columbia, Florida, Indiana, Iowa, Kansas, Kentucky, Maryland, Nebraska, New Jersey, Oklahoma, Oregon, Rhode Island, Tennessee, Texas, Utah, West Virginia, Wisconsin.

‡Colorado, Florida, Illinois, Louisiana, Maryland, Minnesota, Missouri, Ohio, Oregon, Texas, Wisconsin.

PRINCIPAL MATERIALS CONSUMED BY KIND, QUANTITY AND COST, FOR THE UNITED STATES: 1939, 1937 AND 1929

	*1939	†1937	‡1929
Durum flour—Barrels	816,755		
Cost	$3,760,088		
Semolina flour—Barrels	2,159,987	3,269,940	2,688,619
Cost	$11,173,419	$22,273,066	$19,236,012
Other flour—Barrels	508,165		
Cost	$2,136,832		
Beet and cane sugar§—Pounds	501,550	$.....	$.....
Cost	$24,416	$.....	$.....
Corn sugar—Pounds	89,479	$.....	$.....
Cost	$3,526	$.....	$.....
Eggs, fresh, frozen, dried or canned, cost	$2,603,183	$2,408,752	$1,794,242

*Detail data reported by 321 establishments, value of products of which amounted to 98.8% of the total value of products for the industry. †Detail data reported by 299 establishments, value of products of which amounted to 97.3% of the total value of products for the industry. ‡Detail data reported by 309 establishments, value of products of which amounted to 99% of the total value of products for the industry. ¶Figures combined to avoid disclosing, exactly or approximately, data reported by individual establishments. §Not called for on schedule.

Principal Materials Consumed in the Macaroni Industry, by Kind, Quantity and Cost, in the United States, by States: 1939

DURUM FLOUR

	Barrels	Cost
California	34,280	$167,644
Illinois	190,937	899,899
Michigan	16,701	78,882
Minnesota	33,384	134,129
Missouri	19,267	88,168
New York	180,405	862,958
Ohio	32,021	147,452
Pennsylvania	162,065	749,079
Other states*	147,695	631,877
United States	816,755	$3,760,088

SEMOLINA FLOUR

California	126,883	$719,030
Connecticut	47,802	213,461
Illinois	243,000	1,273,826
Louisiana	89,272	414,916
Massachusetts	75,262	377,442
Michigan	45,418	237,721
Minnesota	28,339	134,283
Missouri	72,335	324,180
New Jersey	98,825	492,152
New York	799,799	4,272,192
Ohio	30,292	183,058
Pennsylvania	239,922	1,159,317
Rhode Island	34,636	173,434
Washington	12,801	83,694
Other states†	215,401	1,114,713
United States	2,159,987	$11,173,419

OTHER FLOUR

California	67,444	$258,024
Illinois	9,790	33,469
Louisiana	14,831	53,984
Michigan	11,091	50,926
Missouri	57,933	268,629
New York	73,560	330,530
Oregon	17,240	63,077
Pennsylvania	38,604	167,699
Texas	21,578	77,860
Washington	29,306	100,450
Other states‡	166,788	732,184
United States	508,165	$2,136,832

EGGS, FRESH, FROZEN, DRIED, OR CANNED

California	$148,052
Illinois	527,643
Louisiana	8,111
Maryland	7,078
Massachusetts	7,779
Michigan	19,109
Missouri	74,936
New York	659,337
Ohio	84,329
Pennsylvania	416,659
Washington	47,934
Other states¶	602,216
United States	$2,603,183

*Colorado, Connecticut, Florida, Indiana, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Nebraska, New Jersey, Oregon, Tennessee, Texas, Washington, Wisconsin. †Colorado, District of Columbia, Florida, Indiana, Kansas, Kentucky, Maryland, Oregon, Tennessee, Texas, Utah, Wisconsin. ‡Colorado, Florida, Indiana, Kansas, Kentucky, Maryland, Massachusetts, New Jersey, Ohio, Oklahoma, Tennessee, Utah, Wisconsin. ¶Colorado, Connecticut, District of Columbia, Florida, Indiana, Kansas, Kentucky, Minnesota, Nebraska, New Jersey, Oregon, Tennessee, Texas, Utah, Wisconsin.

PRINCIPAL MATERIALS CONSUMED IN THE MACARONI INDUSTRY, AND COST, IN THE UNITED STATES, BY STATES: 1937

Macaroni, Spaghetti, Vermicelli and Noodles

	Value of products of establishments reporting	Flour—Barrels	Flour—Cost	Eggs, fresh, dried and frozen, cost
California	$3,930,043	230,998	$1,613,437	$157,781
Connecticut	528,080	39,331	327,371	3,869
Illinois	6,408,278	388,431	2,629,264	513,472
Louisiana	1,105,875	95,149	598,579	8,588
Massachusetts	1,039,028	75,119	596,285	16,609
Michigan	1,093,842	87,809	532,111	21,934
Missouri	2,003,316	161,738	983,893	94,778
New Jersey	4,063,473	209,284	1,516,483	217,524
New York	14,836,411	968,935	6,794,970	609,664
Ohio	1,071,940	69,900	472,287	58,716
Pennsylvania	5,253,109	389,623	2,693,010	283,898
Rhode Island	493,839	40,024	319,325	4,325
Texas	403,501	25,143	157,251	2,470
Washington	596,185	41,072	243,607	23,026
Wisconsin	656,000	46,383	298,062	56,087
Other states	5,546,383	393,001	2,497,131	344,861
United States	$49,028,203	3,261,940	$22,273,066	$2,408,752

The figures given in this table represent returns from 299 establishments, which reported products having a combined value of $49,028,203, or 97.3% of the total for the industry. Statistics are presented for all states for which separate figures can be given without disclosing data for individual establishments.

UNITED STATES CENSUS REPORTS ON PREPARED FEEDS

This industry embraces establishments engaged primarily in the manufacture of mixed feeds from milled grain and ingredients such as alfalfa meal, soybean flour and meal, bone meal, molasses, etc. Alfalfa meal and soybean flour and meal are also made for sale as such in some cases. Some of the establishments in this industry mill the grain that they use, and others purchase all their materials.

GENERAL STATISTICS FOR UNITED STATES

	1939	1937	1935
Number of establishments	1,383	1,136	943
Proprietors and firm members	981	717	486
Persons reported by manufacturing establishments, totals	24,177	...	...
Salaried personnel, totals*	3,541	4,793	3,821
Salaried officers of corporations	794	605	636
Manufacturing: Salaried employees	2,747	...	...
Wage earners (average for year)	¶15,401	14,397	11,606
Distribution	4,761	...	...
Construction	243	...	...
Other	231	...	...
Salaries and wages, totals	$31,803,464	$24,485,576	$18,319,316
Salaried officers	3,875,937	2,606,429	2,608,929
Manufacturing: Salaries	4,436,823	...	...
Wages	16,252,988	...	...
Distribution	6,694,642	...	...
Construction	295,114	...	...
Other	247,960	...	...
Wages††	$16,252,988	$15,838,679	$11,068,152
Cost of materials, etc., totals†	$302,640,178	$338,505,107	$230,621,859
Cost of materials, supplies and containers	$298,420,369	$334,955,975	$227,754,114
Cost of fuel	$1,113,775	$914,945	$722,748
Cost of purchased electric energy	$3,030,845	$2,618,448	$2,111,551
Cost of contract work	$75,189	$15,739	$33,446
Value of products†	$401,880,238	$415,211,162	$288,661,804
Value added by manufacture‡	$99,240,060	$76,706,055	$58,039,945

*No data for employees of central administrative offices are included in the figures for any year. †Profits or losses cannot be calculated from the census figures because no data are collected for certain expense items, such as interest, rent, depreciation, taxes, insurance and advertising. ‡Number of employees and salaries reported separately for 1935 only, as follows: supervisory, 744; salaries, $1,716,508. Technical, 110; salaries, $193,107. Clerical, 2,331; salaries, $2,762,620. ¶The item for wage earners is an average of the numbers reported for the several months of the year and includes both full-time and part-time workers. The quotient obtained by dividing the amount of wages by the average number of wage earners should not, therefore, be accepted as representing the average wage received by full-time wage earners. ‖Value of products less cost of materials, supplies, fuel, purchased electric energy and contract work.

VALUE OF PRODUCTS FOR THE UNITED STATES: 1939, 1937 AND 1929

	1939	1937	1929
"Prepared feeds (including mineral) for animals and fowls" industry, all products, total value	$401,880,238	$415,211,162	$402,752,534
Prepared feeds and alfalfa meal	344,456,102	367,973,846	366,672,665
Miscellaneous products	3,797,279		
Other products (not classified in this industry)	*41,212,232	46,915,445	36,079,869
Merchandise (goods bought and sold without processing)	11,823,287		
Receipts for contract work	591,338	321,871	.....
Prepared feeds, etc., total value	445,425,953	482,758,767	494,515,693
Made in the industry	344,456,102	367,973,846	366,672,665
Made as secondary products in other industries	100,969,851	114,784,921	127,842,028

*Value of flour, corn meal, corn grits, cereal breakfast preparations, and grain offal.

PRODUCTS, BY KIND, QUANTITY AND VALUE, FOR THE UNITED STATES: 1939, 1937 AND 1929

Product—	1939 Produced in the industry	1939 Produced in other industries	1939 Total	1937	1929
Prepared feeds, etc., total value	$344,456,102	$100,969,851	$445,425,953	$482,758,767	$494,515,693
Prepared feeds:					
Made chiefly from milled grain*—					
Tons	5,384,297	999,651	6,383,948	7,470,946	7,353,244
Value	$188,900,929	$29,868,547	$218,769,476	$313,692,377	$331,220,654
Made chiefly of ingredients other than grain, total value	$139,809,610	$71,013,790	$210,823,400	$161,566,142	$155,067,763
Dog and cat food—					
Total pounds	501,102,916	230,991,789	732,094,705	541,117,262	
Total value	$22,331,958	$11,135,299	$33,467,257	$27,687,489	
Canned—Pounds	323,832,860	177,544,929	501,377,789	412,435,254	
Value	$13,175,434	$9,772,531	$22,947,965	$20,317,230	
Dog biscuit—Pounds	59,286,618	2,408,998	61,695,616		
Value	$3,887,771	$119,845	$4,007,616	128,681,008	†.....
All other—Pounds	117,983,438	51,037,862	169,021,300	$7,370,259	
Value	$5,268,753	$1,242,923	$6,511,676		
Other‡—Tons	3,432,672	1,839,906	5,272,578	†.....	
Value	$117,477,652	$59,878,491	$177,356,143	$133,878,653	
Mineral feeds (minerals only)—					
Tons	301,800	5,917	307,717		
Value	$7,714,237	$35,868	$7,750,105	†.....	
Alfalfa meal (leaf and stem)—					
Tons	416,157	2,969	419,126	391,173	314,074
Value	$8,031,326	$51,646	$8,082,972	$7,500,248	$8,227,276

*Feeds made by milling grain and mixing the resultant products with molasses and other materials. This item does not include dry feeds made in the "Flour and other grain-mill products" industry, statistics for which will be found in the report for that industry. †Not called for on schedule. ‡Stock feed made of meat scraps, tankage, etc., by establishments classified in the "meat packing" industry; stock feed made of cottonseed-mill by-products, by establishments classified in the "cottonseed oil, cake and meal, and linters" industry; stock feed made by establishments in the "corn syrup, corn sugar, corn oil, and starch" industry; feed for fowls, produced by establishments classified in the "rice cleaning and polishing" industry; and prepared feeds for goldfish, birds, etc.

UNITED STATES CENSUS DATA ON PREPARED FEEDS—SUMMARY BY STATES

1939

	No. of establishments	Salaried officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, etc., fuel, purchased energy, and contract work	Value of products	Value added by manufacture‡
Alabama	10	13	194	$80,388	$166,344	$4,823,746	$5,667,124	$843,378
Arizona	4	4	49	18,078	30,613	242,796	377,933	135,137
Arkansas	11	17	145	36,699	110,744	2,352,512	2,889,302	536,990
California	130	67	1,547	399,061	2,086,671	30,300,577	43,188,409	11,887,832
Colorado	38	13	369	95,967	253,484	2,829,806	4,202,078	1,372,272
Florida	15	12	142	27,212	91,791	894,572	1,326,496	431,924
Georgia	14	15	224	44,765	124,836	3,467,029	4,312,672	845,643
Idaho	11	..	46	12,038	29,421	261,802	376,683	114,881
Illinois	55	30	1,115	322,937	1,356,091	23,378,266	33,082,962	9,704,696
Indiana	48	17	323	135,346	324,597	6,657,868	9,917,586	3,259,718
Iowa	77	32	433	150,845	433,538	5,711,404	9,042,560	3,331,156
Kansas	37	17	366	109,868	294,749	3,645,141	5,108,183	1,463,042
Kentucky	9	5	91	15,265	90,318	2,062,126	2,615,865	553,739
Louisiana	9	9	261	23,474	179,995	2,638,263	3,687,479	1,049,216
Maryland	28	17	468	77,038	384,429	7,479,884	9,440,922	1,961,038
Massachusetts	24	19	318	71,312	359,436	7,330,717	9,383,169	2,053,052
Michigan	31	13	162	68,383	155,303	1,546,505	2,537,778	991,273
Minnesota	37	23	238	67,781	266,508	3,620,805	5,185,190	1,564,385
Mississippi	6	1	100	39,260	69,780	1,800,092	2,284,931	484,839
Missouri	45	50	641	173,956	733,078	13,964,155	20,533,366	6,569,211
Montana	6	..	50	12,610	49,697	374,118	557,340	183,222
Nebraska	24	5	235	73,678	216,661	3,252,199	4,341,159	1,088,960
New Hampshire	5	5	44	27,257	47,575	1,529,975	1,909,892	379,917
New Jersey	31	16	301	119,133	325,436	4,879,435	6,672,648	1,793,213
New York	123	122	2,242	913,267	3,031,973	74,977,513	92,881,744	17,904,231
North Carolina	16	13	180	31,072	129,569	2,257,011	3,129,594	872,583
Ohio	70	44	1,055	273,968	1,110,953	17,560,825	24,171,683	6,610,858
Oklahoma	25	8	247	45,427	215,041	3,252,184	4,626,374	1,374,190
Oregon	43	35	279	66,597	310,772	4,874,896	6,144,482	1,269,586
Pennsylvania	133	39	161	161,410	234,034	14,724,505	18,475,281	3,750,776
South Carolina	10	5	15	17,390	15,730	795,591	1,145,529	346,938
Tennessee	23	16	116	93,967	195,661	9,884,585	13,218,476	3,333,891
Texas	59	33	114	113,083	160,268	9,573,936	12,601,582	3,027,646
Utah	12	5	11	16,538	14,616	2,027,469	2,676,087	648,618
Virginia	16	5	28	14,598	32,647	2,734,798	3,461,671	726,873
Washington	67	17	59	45,558	87,840	9,000,407	11,616,203	2,615,796
West Virginia	3	3	2	6,020	1,612	80,045	124,026	43,981
Wisconsin	33	16	28	75,129	41,879	2,178,746	3,336,813	1,158,067
Other states†	45	25	70	200,618	141,854	13,653,074	16,628,366	2,975,292
United States	1,383	794	15,401	$4,436,823	$16,252,988	$302,640,178	$401,880,238	$99,240,060

‡Value of products less cost of materials, supplies, containers, fuel, purchased electric energy, and contract work. †Connecticut, 6 establishments; Delaware, 6; District of Columbia, 1; Maine, 4; New Mexico, 3; Rhode Island, 1; South Dakota, 3; Vermont, 19.

1937

	No. of establishments	Salaried officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, etc., fuel, purchased energy, and contract work	Value of products	Value added by manufacture
Alabama	8	93	732	$185,199	$178,034	$4,324,491	$5,325,006	$1,000,515
Arizona	4	14	45	22,503	39,653	530,713	662,652	131,939
Arkansas	7	38	136	106,010	113,678	2,903,693	3,253,031	349,338
California	124	423	1,748	862,763	2,334,845	32,247,334	41,459,381	9,212,047
Colorado	32	73	377	108,655	263,466	3,481,400	4,525,143	1,043,743
Connecticut	8	40	108	70,280	120,189	1,607,264	2,019,889	412,625
Delaware	5	15	29	13,699	21,116	607,769	733,494	125,725
Florida	11	45	109	50,996	63,550	650,938	1,024,746	373,808
Georgia	8	62	184	117,741	98,282	2,949,196	3,573,504	624,308
Idaho	7	18	35	17,206	31,206	242,159	443,677	201,518
Illinois	41	525	984	888,984	1,192,597	29,005,691	36,827,245	7,821,554
Indiana	31	149	350	232,630	365,987	9,092,288	11,318,337	2,226,049
Iowa	44	122	221	208,414	196,924	2,804,515	4,305,644	1,501,129
Kansas	31	60	250	113,937	238,279	5,524,299	6,933,830	1,409,531
Kentucky	7	20	79	30,289	91,478	1,152,139	1,429,518	277,379
Louisiana	9	79	245	116,228	167,471	1,870,070	2,877,442	1,007,372
Maryland	19	68	280	128,476	271,782	7,642,631	8,828,691	1,186,060
Massachusetts	17	66	334	158,786	389,043	7,190,298	8,951,824	1,761,526
Michigan	21	47	116	100,733	115,889	1,937,647	2,834,326	896,679
Minnesota	25	125	242	251,968	258,647	5,071,108	6,614,773	1,543,665
Mississippi	4	38	115	51,806	57,006	2,237,945	2,575,625	337,680
Missouri	37	183	686	314,394	688,496	20,106,704	26,319,964	6,213,260
Montana	4	9	53	17,560	63,640	753,685	1,160,217	406,532
Nebraska	16	37	193	58,982	174,076	2,990,737	3,750,283	759,546
New Hampshire	5	15	31	41,828	34,201	1,284,478	1,460,842	176,364
New Jersey	36	106	294	159,572	296,686	2,477,493	3,833,138	1,355,645
New York	106	862	2,207	1,626,761	3,075,893	87,876,541	100,483,257	12,606,716
North Carolina	7	19	102	39,404	72,769	1,320,153	1,580,978	260,825
Ohio	40	314	801	629,862	975,998	20,288,344	24,977,220	4,688,876
Oklahoma	18	58	168	101,219	136,722	3,476,300	4,277,096	800,796
Oregon	36	74	258	135,729	299,625	4,972,303	5,978,947	1,006,644
Pennsylvania	132	230	887	420,376	925,675	16,574,079	19,866,812	3,292,733
South Carolina	7	22	86	30,665	59,472	601,349	807,789	206,440
Tennessee	13	188	422	340,169	314,969	9,349,673	11,414,086	2,064,413
Texas	43	188	574	322,976	433,757	8,255,271	9,907,690	1,652,419
Utah	10	16	130	23,151	149,348	2,617,815	3,093,493	475,678
Virginia	12	32	94	40,766	60,719	2,644,430	3,185,523	541,093
Washington	80	147	632	208,348	833,152	14,768,499	18,252,054	3,483,555
West Virginia	2	8	17	*.....	15,527	151,604	196,647	45,043
Wisconsin	37	129	239	185,455	258,689	4,169,537	5,749,802	1,580,265
Other states†	21	36	300	$112,077	350,143	10,752,524	12,397,546	1,645,022
United States	1,126	4,793	14,397	$8,646,897	$15,838,679	$338,505,107	$415,211,162	$76,706,055

*Included in figures for "other states" to avoid disclosing, exactly or approximately, salaries paid to individual employees. †Maine, two establishments; Nevada, two; New Mexico, three; Rhode Island, one; South Dakota, one; Vermont, 12. ‡Includes salary figure for West Virginia.

UNITED STATES CENSUS DATA ON FEED PRODUCTION BY STATES—1939

Statistics are given for all states for which separate figures can be published without disclosing, exactly or approximately, the production reported by individual establishments. Certain of the "other states," however, are more important in the industry than some of the states shown separately.

PREPARED FEEDS
(Made chiefly from grain)

State—	Tons	Value
Arkansas	13,858	$346,182
California	671,034	24,777,094
Colorado	30,839	1,090,939
Florida	20,693	606,665
Georgia	108,930	4,031,725
Idaho	7,620	255,193
Illinois	344,454	10,262,127
Indiana	120,946	4,837,162
Iowa	204,451	5,016,303
Kansas	85,562	3,071,188
Kentucky	54,174	1,688,518
Louisiana	31,937	1,238,804
Maryland	197,201	7,080,715
Massachusetts	180,493	6,462,990
Michigan	34,012	1,328,308
Minnesota	107,710	3,103,657
Mississippi	51,407	1,501,257
Missouri	346,866	13,225,323
Montana	11,911	443,654
Nebraska	79,746	3,034,033
New Jersey	27,208	835,921
New Mexico	368	13,585
New York	1,080,863	35,074,752
North Carolina	109,057	4,579,669
Ohio	477,580	16,136,668
Oklahoma	91,933	3,091,873
Oregon	110,783	3,650,734
Pennsylvania	316,326	11,224,639
South Carolina	16,810	668,548
South Dakota	3,210	111,123
Tennessee	249,135	9,169,472
Texas	230,242	7,713,303
Utah	86,732	2,452,867
Virginia	81,629	2,632,157
Washington	279,948	9,131,454
West Virginia	4,849	168,785
Wisconsin	66,270	2,643,383
Other states	447,161	16,068,706
United States	6,383,948	$218,769,476

PREPARED FEEDS
(Made chiefly of ingredients other than grain)

State—	Tons	Value
Alabama	45,221	$1,480,614
Arizona	9,014	346,397
Arkansas	34,554	878,631
California	292,365	10,450,157
Delaware	3,750	141,917
Florida	17,015	419,300
Georgia	45,302	1,643,869
Idaho	1,358	50,532
Illinois	844,408	26,588,181
Indiana	248,416	8,837,340
Iowa	235,327	7,464,594
Kansas	59,121	2,560,336
Kentucky	40,447	1,249,804
Louisiana	24,199	781,502
Maryland	33,173	1,365,727
Massachusetts	37,133	1,703,214
Michigan	23,653	1,029,497
Minnesota	167,970	6,826,049
Mississippi	18,663	517,092
Missouri	309,733	6,794,640
Montana	1,464	34,804
Nebraska	81,528	2,816,385
New Jersey	138,535	4,547,565
New York	1,303,034	44,532,730
North Carolina	17,703	609,577
Ohio	268,817	10,437,458
Oklahoma	28,195	879,198
Oregon	52,245	1,947,959
Pennsylvania	151,558	5,730,597
Rhode Island	2,345	98,697
South Carolina	9,452	287,544
South Dakota	10,291	441,073
Tennessee	117,396	3,848,635
Texas	228,384	6,545,881
Virginia	61,156	2,100,832
Washington	99,097	3,225,853
Wisconsin	42,869	1,532,829
Other states	167,687	6,609,133
United States	5,272,578	$177,356,143

DOG AND CAT FOOD—CANNED

State—	Pounds	Value
California	81,766,991	$3,620,092
Illinois	139,756,268	7,473,423
Indiana	8,709,424	276,430
Kansas	18,445,108	894,529
Massachusetts	3,983,650	157,361
New York	39,555,771	1,394,421
Ohio	32,562,206	922,890
Pennsylvania	23,866,897	1,406,144
Texas	25,488,886	908,020
Washington	2,224,177	96,956
Other states	125,018,412	5,797,099
United States	501,377,789	$22,947,965

DOG AND CAT FOOD
(Other than canned, including dog biscuit)

State—	Pounds	Value
California	11,352,575	$726,409
Illinois	30,638,786	793,873
Massachusetts	16,679,916	665,430
Michigan	11,507,016	557,643
Minnesota	3,442,286	185,914
Missouri	1,127,860	37,369
New York	58,789,643	3,192,358
Ohio	5,911,073	278,213
Oregon	1,031,000	42,653
Pennsylvania	5,575,882	220,635
Texas	654,990	28,388
Other states	84,005,889	3,790,407
United States	230,716,916	$10,519,292

MINERAL FEEDS
(Minerals only)

State—	Tons	Value
California	19,921	$179,800
Indiana	5,321	403,723
Iowa	21,006	1,628,148
Minnesota	1,218	53,367
Pennsylvania	5,736	345,053
Texas	12,757	134,221
Washington	5,669	98,010
Other states	236,089	4,907,783
United States	307,717	$7,750,105

ALFALFA MEAL
(Leaf and stem)

State—	Tons	Value
Arkansas	5,249	$104,836
California	74,919	1,599,572
Michigan	14,727	297,085
Missouri	3,879	96,950
Nebraska	42,787	756,115
Ohio	85,444	1,717,952
Oklahoma	17,055	348,171
Texas	5,441	102,497
Washington	3,879	66,666
Other states	165,746	2,993,128
United States	419,126	$8,082,972

Expenditures for Feed Plant and Equipment in the United States: 1939

Number of establishments—Total for the industry	1,383
Reporting expenditures for plant and equipment	764
Value of products—	
Total for the industry	$401,880,238
Reporting expenditures for plant and equipment	299,661,364
Expenditures for plant and equipment—Total for the industry	4,809,748
Expenditures for new construction or major alterations of buildings and other fixed plant and structures	1,816,791
Expenditures for new machinery and operating equipment	2,625,948
Expenditures for plant and equipment acquired in a "used" condition from other owners and expenditures for land	351,708
Expenditures unclassified	15,301

Prime Movers, Motors, Generators and Electric Energy in the Feed Industry in the United States: 1939, 1929

	1939	1929
Number of establishments	1,383	750
Number of establishments reporting power equipment	1,364	750
Prime movers, aggregate—		
Number	430	210
Horsepower	33,689	16,402
Prime movers, driving generators, total—		
Number	63	*210
Horsepower	10,361	*16,402
Steam engines—		
Number	10	*79
Horsepower	2,381	*8,713
Steam turbines—		
Number	6	*2
Horsepower	688	*105
Diesel and semi-diesel engines—Number	28	
Horsepower	4,374	
Other internal combustion engines†—		*65
Number	13	*6,283
Horsepower	1,854	
Hydroturbines and water wheels—		
Number	6	*64
Horsepower	1,064	*2,301

(Continued on next page.)

Prime movers, driving generators, ordinarily idle (included above)—		
Horsepower	72	
Prime movers not driving generators, total—Number	367	
Horsepower	23,328	
Steam engines—Number	61	‡...
Horsepower	5,434	
Steam turbines—Number	1	
Horsepower	200	
Diesel and semi-diesel engines—Number	103	
Horsepower	9,034	
Other internal combustion engines†—Number	106	
Horsepower	4,849	
Hydroturbines and water wheels—Number	96	‡...
Horsepower	3,811	
Prime movers, not driving generators, ordinarily idle (included above), horsepower	1,260	
Generators, kilowatt rating, total	7,401	1,718
Generators, driven by—Kilowatt rating—		
Steam engines	1,460	
Steam turbines	500	
Diesel and semi-diesel engines	3,082	‡...
Other internal combustion engines†	1,459	
Hydroturbines and water wheels	900	
Generators, ordinarily idle (included above), kilowatt rating	23	¶...
Electric motors, total—Number	17,737	8,468
Horsepower	251,274	157,684
Driven by purchased energy—Number	16,842	8,193
Horsepower	240,602	154,080
Driven by energy generated in establishments reporting—Number	895	275
Horsepower	10,672	3,604

Electric energy (kilowatt hours)—	1939	1929
Generated in plant	7,184,236	¶.....
Sold	278,594	‡.....
Purchased	184,149,477	115,993,089

*Includes data for prime movers not driving generators. †Gas, gasoline, etc. ‡Not called for on schedule. ¶Data not available.

U. S. CENSUS REPORTS ON THE BAKING INDUSTRY

This classification is applied to industrial establishments engaged primarily in baking bread, biscuit, crackers, cakes, pastry, etc. Bakeries operated in connection with restaurants, chain stores, etc., are included whenever it is possible to segregate the bakery business from the other business, or, if such segregation is impossible, where it is obvious that the income derived from the bakery business constitutes the greater part of the total income.

SUMMARY FOR THE UNITED STATES—1899 TO 1939

Census year—	Number of establishments	Wage earners (average for year)	Wages	Cost of materials, supplies, fuel, purchased electric energy, and contract work*	Value of products	Value added by manufacture†	Horsepower of prime movers
Bakery products subgroup, total—1939	18,399	230,706	$290,551,182	$649,476,628	$1,411,816,633	$762,340,005	29,609
1937	17,193	239,388	293,994,425	727,021,811	1,426,162,859	699,141,048	**....
1935	19,068	218,423	248,532,375	670,040,497	1,235,072,900	565,032,403	††....
1933	14,830	182,382	196,672,192	427,464,965	919,777,532	492,312,567	**....
1931	17,718	183,161	239,331,201	505,477,095	1,190,047,770	684,570,675	**....
1929	20,785	200,841	274,561,581	737,099,500	1,526,110,811	789,011,311	38,522
1927	18,129	171,995	236,225,862	693,236,163	1,394,700,224	701,464,061	38,002
1925	17,684	160,411	219,606,219	668,616,500	1,268,194,507	600,178,007	37,875
1923	18,739	162,613	214,578,951	574,520,502	1,122,906,314	548,385,812	37,261
1921	20,173	148,500	198,938,825	598,614,000	1,089,971,652	491,357,652	**....
1919	25,095	141,592	158,237,059	713,239,411	1,151,896,318	438,656,907	39,834
1914	25,963	124,052	76,866,613	274,257,468	491,893,025	217,635,557	37,817
1909	23,926	100,216	59,351,386	238,033,663	396,864,844	158,831,181	33,923
1904	18,226	81,278	43,172,262	155,988,868	269,582,811	113,593,943	28,615
1899	14,836	60,192	27,864,024	95,051,952	175,368,682	80,316,730	20,167
Bread and other bakery products (except biscuit, crackers and pretzels) industry:							
1939	18,043	201,533	262,001,562	567,427,173	1,211,023,755	643,596,582	12,033
1937	16,874	210,597	265,353,891	629,267,129	1,217,865,027	588,597,898	**....
1935	18,720	189,182	222,644,564	580,727,970	1,052,464,404	471,736,434	††....
1933	14,483	155,229	174,422,555	370,992,203	770,332,344	399,341,141	**....
1931	17,364	154,764	212,352,811	436,531,471	979,904,341	543,372,870	**....
1929	20,410	166,970	240,353,512	629,998,836	1,251,621,280	621,622,444	16,440
1927	17,909	139,013	202,197,061	585,303,725	1,145,710,270	560,406,545	14,724
1925	17,490	128,034	187,659,924	560,748,396	1,023,667,999	462,919,603	††....
1923	18,572	127,496	183,220,976	485,169,038	911,118,063	425,949,025	††....
1921	20,024	117,026	169,328,870	515,568,056	902,462,969	386,894,913	††....
1919	24,919	107,251	132,171,264	610,105,001	947,875,753	337,770,752	††....
1914¶	25,797	99,016	66,072,303	230,583,623	402,408,741	171,825,118	††....
Biscuit, crackers and pretzels industry:							
1939	356	29,173	28,549,620	82,049,455	200,792,878	118,743,423	17,576
1937	319	28,791	28,640,534	97,754,682	208,297,832	110,543,150	**....
1935	348	29,241	25,887,811	89,312,527	182,608,496	93,295,969	††....
1933	347	27,153	22,249,637	56,472,762	149,445,188	92,972,426	**....
1931	354	28,397	26,978,390	68,945,624	210,143,429	141,197,805	**....
1929	375	33,871	34,208,069	107,100,664	274,489,531	167,388,867	22,082
1927	220	32,982	34,028,801	107,932,438	248,989,954	141,057,516	23,278
1925	194	32,377	31,946,295	107,268,104	244,526,508	137,258,404	††....
1923	167	35,117	31,357,975	89,351,464	211,788,251	122,436,787	††....
1921	149	31,474	29,109,955	83,045,944	187,508,683	104,462,739	††....
1919	176	34,341	26,065,795	103,134,410	204,020,565	100,886,155	††....
1914¶	166	25,036	10,794,310	43,673,845	89,484,284	45,810,439	††....

*Figures for years prior to 1935 do not include cost of contract work. †Value of products less cost of materials, supplies, fuel, purchased electric energy, and contract work. **Not called for on schedule. ††Data not available. ¶No comparable data are available for years prior to 1914.

SUMMARY FOR THE BREAD AND OTHER BAKERY PRODUCTS INDUSTRY (EXCEPT BISCUIT AND CRACKER): 1939 AND 1937

Bread and Other Bakery Products (except Biscuit, Crackers and Pretzels) Industry—	1939	1937	% increase or decrease (—)
Number of establishments	18,043	16,874	7.0
Salaried personnel*	16,704	20,661	—19.1
Salaries*†	$36,974,886	$38,955,533	—5.0
Wage earners (average for the year)‡	201,533	210,597	—4.3
Wages‡‡	$262,001,562	$265,353,891	—1.3
Cost of materials, supplies, fuel, purchased electric energy and contract work†	$567,427,173	$629,267,129	—9.8
Value of products†	$1,211,023,755	$1,217,865,027	—0.5
Value added by manufacture¶	$643,596,582	$588,597,898	9.4
Wholesale Only—			
Number of establishments	2,569	2,478	3.7
Salaried personnel*	6,067	7,901	—23.1
Salaries*†	$14,373,015	$17,299,998	—16.9
Wage earners (average for the year)‡	**62,942**	**80,910**	**—22.2**
Wages‡‡	**$83,379,584**	**$106,720,322**	**—21.9**
Cost of materials, supplies, fuel, purchased electric energy and contract work†	**$175,728,839**	**$258,851,440**	**—32.1**
Value of products†	**$384,763,786**	**$503,873,643**	**—23.6**
Value added by manufacture¶	**$209,034,947**	**$245,022,203**	**—14.7**
Retail Only—	**1939**	**1937**	**% increase or decrease (—)**
Number of establishments	8,978	9,385	—4.3
Salaried personnel*	2,657	4,627	—42.6
Salaries*†	$5,439,150	$6,968,479	—21.9
Wage earners (average for the year)‡	43,581	53,704	—18.3
Wages‡‡	$54,874,328	$64,252,808	—14.6
Cost of materials, supplies, fuel, purchased electric energy and contract work†	$130,167,560	$147,732,960	—11.9
Value of products†	$267,005,930	$284,236,797	—5.9
Value added by manufacture¶	$136,838,370	$136,503,837	0.5
Wholesale and Retail Combined—			
Number of establishments	6,496	5,011	29.7
Salaried personnel*	7,980	8,133	—1.8
Salaries‡‡	$17,162,721	$14,687,056	17.0
Wage earners (average for the year)‡‡	**94,740**	**75,983**	**24.7**
Wages‡‡	**$123,747,650**	**$94,380,761**	**31.1**
Cost of materials, supplies, fuel, purchased electric energy and contract work†	**$261,530,774**	**$222,682,729**	**17.4**
Value of products†	**$559,254,039**	**$429,754,587**	**30.1**
Value added by manufacture¶	**$297,723,265**	**$207,071,858**	**43.8**

***No data for employees of central administrative offices are included. †Profits or losses cannot be calculated from the census figures because no data are collected for certain expense items, such as interest, rent, depreciation, taxes, insurance and advertising. ‡The item for wage earners is an average of the numbers reported for the several months of the year and includes both full-time and part-time workers. The quotient obtained by dividing the amount of wages by the average number of wage earners should not, therefore, be accepted as representing the average wage received by full-time wage earners. ¶Value of products less cost of materials, supplies, fuel, purchased electric energy and contract work.**

UNITED STATES CENSUS DATA ON ESTABLISHMENTS MANUFACTURING BREAD AND OTHER BAKERY PRODUCTS EXCEPT BISCUIT AND CRACKERS, CLASSIFIED INTO WHOLESALE AND RETAIL BAKERIES: 1939

"Bread and Other Bakery Products (Except Biscuit, Crackers and Pretzels)" Industry

Item—	Total for the industry	Reported by bakeries classified as—Wholesale only	Retail only	Wholesale and retail combined
Number of establishments	18,043	2,569	8,978	6,496
Number of retail shops operated	16,590	.....	10,159	6,431
Number of house-to-house retail routes operated	18,421	.....	8,003	10,418
Proprietors and firm members	18,783	2,294	9,550	6,939
Persons reported by manufacturing industries, total	247,591	74,527	57,757	115,307
Salaried officers of corporations	3,094	1,084	650	1,360
Manufacturing—Salaried employees	13,610	4,983	2,007	6,620
Wage earners (average for the year)	201,533	62,942	43,851	94,740
Distribution	24,720	4,138	10,361	10,221
Construction	1,007	387	88	532
Other	3,627	993	800	1,834
Salaries and wages, total	$330,665,684	$105,519,375	$69,731,789	$155,414,520
Salaried officers	$12,666,456	$4,944,860	$1,959,252	$5,762,344
Manufacturing—Salaries	$24,308,430	$9,428,155	$3,479,898	$11,400,377
Wages	$262,001,562	$83,379,584	$54,874,328	$123,747,650
Distribution	$26,289,702	$6,156,301	$8,470,426	$11,662,975
Construction	$1,510,628	$519,524	$175,218	$815,886
Other	$3,888,906	$1,090,951	$772,667	$2,025,288
Cost of materials, supplies, containers, fuel, purchased electric energy, and contract work, total	$567,427,173	$175,728,839	$130,167,560	$261,530,774
Materials, supplies, containers	$539,981,125	$168,173,424	$122,366,496	$249,441,205
Fuel	$16,043,573	$4,410,811	$4,573,896	$7,058,866
Purchased electric energy	$11,294,645	$3,144,604	$3,226,195	$5,023,846
Contract work	$7,830	.....	$973	$6,857
Value of products	$1,211,023,755	$384,763,786	$267,005,930	$559,254,039
Value added by manufacture¶	$643,596,582	$209,034,947	$136,838,370	$297,723,265

¶Value of products less cost of materials, supplies, containers, fuel, purchased electric energy, and contract work.

SUMMARY FOR THE BISCUIT AND CRACKER INDUSTRY: 1939 AND 1937

(Because they account for a negligible portion of the national output, plants with annual production valued at less than $5,000 have been excluded since 1919.)

	1939	1937	% increase or decrease (—)
Number of establishments	356	319	11.6
Salaried personnel*	2,388	3,086	—22.6
Salaries*†	$5,695,122	$6,505,246	—12.5
Wage earners (average for the year)‡	29,173	28,791	1.3
Wages‡‡	$28,549,620	$28,640,534	—0.3
Cost of materials, supplies, fuel, purchased electric energy and contract work†	$82,049,455	$97,754,682	—16.1
Value of products†	$200,792,878	$208,297,832	—3.6
Value added by manufacture¶	$118,743,423	$110,543,150	7.4

***No data for employees of central administrative offices are included. †Profits or losses cannot be calculated from the census figures because no data are collected for certain expense items, such as interest, rent, depreciation, taxes, insurance and advertising. ‡The item for wage earners is an average of the numbers reported for the several months of the year and includes both full-time and part-time workers. The quotient obtained by dividing the amount of wages by the average number of wage earners should not, therefore, be accepted as representing the average wage received by full-time wage earners. ¶Value of products less cost of materials, supplies, fuel, purchased electric energy, and contract work.**

GENERAL STATISTICS IN DETAIL FOR THE UNITED STATES ON "BREAD AND OTHER BAKERY PRODUCTS (EXCEPT BISCUIT, CRACKERS AND PRETZELS)," BY STATES: 1939

	No. of establishments	Persons reported by manufacturing industries, total	Salaries and wages, total	Cost of materials, supplies, containers, purchased electricity, and contract work	Value of products	Value added by manufacture
Alabama	80	2,068	$2,074,218	$3,933,709	$8,607,617	$4,673,908
Arizona	55	600	782,216	1,575,070	3,349,696	1,774,626
Arkansas	65	1,081	1,120,603	2,186,839	4,910,418	2,723,579
California	1,225	14,734	22,785,455	32,268,659	80,221,290	43,952,631
Colorado	152	1,821	2,213,925	3,938,871	8,422,889	4,484,018
Connecticut	383	4,320	5,638,715	9,941,036	20,479,012	10,537,976
Delaware	34	490	658,174	1,088,336	2,392,993	1,304,657
Dist. of Col.	88	2,056	3,487,507	4,778,443	11,567,426	6,788,983
Florida	181	2,956	3,201,451	6,466,186	14,164,075	7,697,889
Georgia	105	2,667	2,850,753	5,434,832	11,663,223	6,228,391
Idaho	64	509	568,501	1,239,705	2,498,370	1,258,665
Illinois	1,565	18,545	25,679,642	44,175,283	92,112,679	47,937,396
Indiana	390	6,250	7,346,508	13,197,191	28,056,420	14,859,229
Iowa	288	3,731	4,544,062	8,110,110	17,326,166	9,216,059
Kansas	202	1,956	2,066,198	4,113,177	8,251,617	4,138,440
Kentucky	117	2,107	2,471,762	4,994,288	9,973,239	4,978,951
Louisiana	230	3,060	2,964,768	6,078,888	12,170,338	6,091,450
Maine	95	1,448	1,705,846	3,479,504	6,759,951	3,280,447
Maryland	300	4,694	5,876,450	10,461,429	22,245,899	11,784,470
Massachusetts	1,101	13,814	19,011,241	31,845,003	66,622,476	34,777,473
Michigan	686	11,060	15,370,400	26,626,789	55,156,386	28,529,597
Minnesota	443	4,394	5,580,010	10,182,245	21,349,382	11,167,137
Mississippi	61	944	861,119	1,754,021	3,787,677	2,033,656
Missouri	469	7,263	10,371,174	16,770,361	35,714,840	18,994,479
Montana	88	712	851,040	1,877,551	4,020,290	2,142,739
Nebraska	139	2,103	2,504,995	4,370,182	9,243,162	4,872,980
Nevada	19	127	162,007	307,469	620,791	313,322
N. Hampshire	60	882	1,045,022	2,094,431	4,294,857	2,200,426
New Jersey	1,012	11,995	16,875,535	28,666,254	60,261,890	31,595,636
New Mexico	44	392	361,289	853,650	1,756,121	902,471
New York	2,910	38,314	57,714,989	94,583,936	204,500,877	109,916,941
N. Carolina	98	2,822	2,994,613	5,901,469	12,704,304	6,802,835
N. Dakota	59	487	483,322	1,106,736	2,195,263	1,088,527
Ohio	1,072	17,799	23,664,194	38,701,908	84,324,585	45,622,677
Oklahoma	222	2,306	2,404,889	4,862,700	10,052,666	5,189,966
Oregon	188	1,860	2,654,427	4,492,966	9,501,408	5,008,442
Pennsylvania	1,515	26,287	34,791,512	56,794,045	123,139,514	66,345,469
R. Island	164	2,112	2,853,742	4,774,019	10,110,978	5,336,959
S. Carolina	39	1,266	1,317,031	2,662,131	5,873,690	3,211,559
S. Dakota	83	585	553,128	1,359,287	2,646,370	1,287,083
Tennessee	117	2,929	3,102,320	5,929,840	12,923,463	6,993,623
Texas	535	6,902	7,515,966	15,694,908	32,994,866	17,299,958
Utah	33	644	912,235	1,838,661	3,766,823	1,928,162
Vermont	49	501	532,228	1,114,105	2,188,513	1,074,408
Virginia	131	2,596	2,925,070	5,834,859	12,193,874	6,359,015
Washington	330	3,105	4,678,267	7,274,396	16,363,218	9,088,822
W. Virginia	108	2,180	3,025,528	4,966,494	10,663,210	5,696,716
Wisconsin	604	5,823	7,215,241	12,013,018	25,563,868	13,550,850
Wyoming	50	298	296,416	712,183	1,315,075	602,892
U. S.	18,043	247,591	$330,665,684	$567,427,173	$1,211,023,755	$643,596,582

GENERAL STATISTICS IN DETAIL FOR "BISCUIT, CRACKERS AND PRETZELS" BY STATES: 1939

California	28	1,655	$2,134,809	$4,010,484	$10,313,609	$6,303,125
Illinois	23	4,372	5,221,894	11,453,852	27,568,398	16,114,546
Indiana	7	1,012	1,262,793	1,826,199	3,836,640	2,010,441
Iowa	8	1,107	1,212,394	2,718,936	5,089,297	2,370,361
Louisiana	7	649	660,130	1,038,569	2,347,185	1,308,616
Maryland	6	891	1,007,433	1,366,341	3,412,926	2,046,585
Massachusetts	14	2,022	2,251,523	4,911,092	12,737,718	7,826,626
Michigan	13	1,402	1,645,814	3,876,814	8,728,640	4,851,826
Minnesota	11	588	776,644	1,300,272	3,372,453	2,072,181
Missouri	13	1,812	2,149,899	3,548,495	9,006,863	5,458,368
Nebraska	4	344	432,768	597,422	1,316,439	719,017
New Jersey	13	1,182	981,154	3,456,376	5,488,867	2,032,491
New York	26	5,797	7,477,827	12,577,483	38,381,756	25,804,273
Ohio	21	2,914	3,502,699	8,307,007	19,278,089	10,971,082
Oregon	5	236	333,822	412,061	1,130,976	768,915
Pennsylvania	83	4,062	4,523,993	7,584,385	18,835,927	11,251,542
Tennessee	6	552	577,036	1,147,302	2,809,259	1,661,957
Texas	6	715	784,351	1,571,973	4,161,041	2,589,068
Washington	17	582	716,865	1,193,250	2,794,478	1,601,228
Wisconsin	6	808	976,757	1,664,893	3,689,858	2,024,965
Other states*	39	3,236	3,428,539	7,486,249	16,442,459	8,956,210
U. S.	356	35,930	$42,059,144	$82,049,455	$200,792,878	$118,743,423

*Alabama, 6 establishments; Arkansas, 4; Colorado, 3; Connecticut, 1; Florida, 2; Georgia, 2; Kansas, 2; Kentucky, 2; Maine, 1; Mississippi, 2; New Hampshire, 1; North Carolina, 1; North Dakota, 1; Oklahoma, 2; South Carolina, 2; South Dakota, 1; Utah, 2; Vermont, 1; Virginia, 3.

EQUIPMENT USED IN THE BAKERY PRODUCTS INDUSTRY—NUMBER AND KIND OF OVENS AND DELIVERY VEHICLES, FOR THE UNITED STATES: 1939, 1929

The data given in this table were furnished by establishments which reported the following percentages of the value of products: For the "Bread and other bakery products (except biscuit, crackers and pretzels)" industry—1939, 16,965 establishments, or 97.1%. For the "Biscuit, crackers and pretzels" industry—1939, 331 establishments, or 82.5%. Similar data for 1929 not available.

	Reported for 1939, by—						
	Bakeries in the "Bread and other bakery products (except biscuit, crackers and pretzels)" industry, classified as—				Bakeries in "biscuit, crackers and pretzels" industry	Total for the industries	
Kind—	Wholesale only	Retail only	Wholesale and retail combined	Total for the industry		1939	1929
Number of ovens—							
Draw-plate	194	770	446	1,410	26	1,436	1,828
Peel	2,142	6,872	5,915	14,929	136	15,065	16,537
Portable	173	1,492	664	2,329	12	2,341	3,339
Rack	427	959	630	2,016	30	2,046	1,386
Reel	593	759	1,393	2,745	424	3,169	1,430
Rotary	787	669	924	2,380	62	2,442	1,516
Sugar-wafer	6	17	9	32	160	192	305
Traveling-hearth	230	78	258	566	98	664	410
Traveling-tray	592	256	762	1,610	89	1,699	565
Number of delivery vehicles—							
Horse-drawn	56	347	1,047	1,450	...	1,450	6,715
Gasoline	21,000	9,563	32,698	63,261	1,866	65,127	42,524
Electric	921	131	593	1,645	32	1,677	3,983

PRINCIPAL MATERIALS CONSUMED IN THE UNITED STATES IN THE "BREAD AND OTHER BAKERY PRODUCTS" (EXCEPT BISCUIT, CRACKERS AND PRETZELS) INDUSTRY AND IN THE "BISCUIT, CRACKERS AND PRETZELS" INDUSTRY COMBINED, BY KIND, QUANTITY AND COST, BY STATES: 1939

The combined value of products reported by the 17,516 establishments that supplied detailed data on materials consumed represented 98.1% of the total value of products for the two industries named.

FLOUR (IN BARRELS)

		Wheat flour			
State—	Total	White	Whole-wheat (including graham)	Rye flour	Other flour
Alabama	339,112	327,418	8,605	857	2,432
Arizona	120,784	109,783	8,181	609	2,211
Arkansas	243,910	234,189	4,803	754	4,164
California	2,903,541	2,538,529	231,373	53,912	79,827
Colorado	383,958	351,557	20,999	4,960	6,442
Connecticut	661,080	560,265	32,512	44,026	24,277
Delaware	84,545	77,515	3,456	2,616	958
District of Columbia	367,890	334,468	13,874	12,865	6,683
Florida	472,404	422,407	27,062	8,020	14,915
Georgia	464,192	445,690	11,884	2,658	3,960
Idaho	86,201	75,235	9,009	549	1,408
Illinois	3,718,637	3,254,009	128,701	198,639	137,288
Indiana	1,261,028	1,187,500	33,298	15,668	24,562
Iowa	981,071	897,787	37,703	14,274	31,307
Kansas	407,955	377,838	19,471	2,084	8,562
Kentucky	456,539	435,800	9,384	3,988	7,367
Louisiana	596,034	575,719	13,265	2,155	4,895
Maine	265,490	245,206	7,346	3,458	9,480
Maryland	904,823	829,479	24,810	18,819	31,715
Massachusetts	2,465,892	2,195,738	92,177	80,710	97,267
Michigan	2,280,392	1,985,298	118,984	84,485	91,625
Minnesota	790,358	692,408	39,292	31,677	26,981
Mississippi	145,301	139,634	4,015	341	1,311
Missouri	1,720,705	1,614,176	55,220	30,490	20,819
Montana	123,935	108,730	8,575	2,224	4,406
Nebraska	396,817	362,852	14,091	12,143	7,731
Nevada	23,168	19,806	1,657	313	1,392
New Hampshire	148,302	127,475	6,210	5,004	9,613
New Jersey	2,105,655	1,748,762	87,636	156,649	112,608
New Mexico	57,954	51,955	4,111	955	933
New York	7,115,848	5,967,567	305,749	527,913	314,619
North Carolina	421,804	404,249	10,507	1,046	6,002
North Dakota	99,366	91,879	4,320	1,523	1,644
Ohio	3,414,510	3,091,712	114,300	106,302	102,196
Oklahoma	444,177	413,234	22,396	2,618	5,929
Oregon	342,723	296,157	32,854	7,793	5,919
Pennsylvania	4,585,251	4,120,476	162,066	155,190	147,519
Rhode Island	363,935	337,620	8,022	6,777	11,516
South Carolina	189,450	183,451	4,202	1,200	597
South Dakota	128,459	115,509	6,180	2,302	4,468
Tennessee	578,290	562,068	11,157	2,010	3,055
Texas	1,489,957	1,410,584	55,084	12,485	11,804
Utah	154,645	143,619	9,018	906	1,102
Vermont	89,642	79,874	4,139	1,677	3,952
Virginia	510,331	489,989	12,129	2,404	5,749
Washington	621,219	537,264	60,754	11,984	11,217
West Virginia	398,869	384,530	6,712	2,541	5,086
Wisconsin	1,008,619	871,304	36,549	62,030	38,736
Wyoming	49,266	39,654	5,775	2,458	1,379
United States	46,984,034	41,867,968	1,949,517	1,706,921	1,459,628

EQUIPMENT USED IN THE BAKERY PRODUCTS INDUSTRY—NUMBER AND KIND OF OVENS AND DELIVERY VEHICLES, FOR THE U. S. AND BY STATES: 1939

	Number of ovens reported									Number of delivery vehicles reported		
	Drawplate	Peel	Portable	Rack	Reel	Rotary	Sugar-wafer	Traveling-hearth	Traveling-tray	Horse-drawn	Gasoline	Electric
Alabama	8	66	6	17	28	20	..	4	13	1	535	15
Arizona	1	39	5	15	11	15	..	1	6	..	125	..
Arkansas	4	16	2	3	40	16	..	..	14	..	344	..
California	92	998	157	155	246	238	17	44	112	..	4,183	17
Colorado	6	80	24	11	53	24	2	4	17	..	517	5
Connecticut	44	353	71	31	9	39	..	15	18	..	1,280	..
Delaware	..	31	4	..	2	4	..	..	5	1	167	..
D. of Col.	16	58	26	11	14	26	..	10	8	5	603	22
Florida	10	117	28	28	37	27	..	8	20	..	792	13
Georgia	8	116	22	23	26	21	2	1	24	18	705	..
Idaho	2	51	3	19	4	1	..	..	9	..	131	..
Illinois	94	1,288	200	96	212	235	33	33	151	4	4,234	182
Indiana	24	257	74	45	89	38	4	11	45	8	1,848	25
Iowa	9	190	47	38	65	28	8	6	49	..	1,047	32
Kansas	2	56	16	8	152	19	..	5	23	..	525	3
Kentucky	1	75	16	15	20	21	..	6	21	50	488	1
Louisiana	15	288	26	28	61	22	1	4	16	..	820	5
Maine	5	74	9	12	22	7	..	1	14	1	298	..
Maryland	16	278	36	16	28	56	1	12	24	130	1,570	29
Massachus'ts	131	736	215	93	119	146	1	30	85	60	3,260	88
Michigan	40	558	94	49	81	85	11	32	67	63	2,879	43
Minnesota	10	282	64	22	80	72	1	11	30	25	989	..
Mississippi	..	45	8	6	25	3	..	..	13	1	265	..
Missouri	31	341	40	22	136	61	4	31	40	83	1,853	52
Montana	1	51	7	13	18	13	..	1	22	1	189	..
Nebraska	9	79	11	8	60	16	..	2	11	14	598	..
Nevada	1	18	3	1	1	1	1	..	1	..	23	..
N. H'pshire	3	31	21	11	7	6	..	..	8	2	207	..
New Jersey	109	1,124	97	150	30	79	10	31	44	17	3,236	167
N. Mexico	1	12	3	1	29	5	..	1	3	..	95	3
New York	385	*3,088	298	430	192	306	58	119	132	310	8,350	765
N. Carolina	6	94	8	15	10	10	..	1	41	..	749	..
N. Dakota	7	40	7	12	12	7	1	..	5	..	144	..
Ohio	102	821	170	150	225	193	8	56	122	133	5,339	87
Oklahoma	11	85	7	44	178	24	..	4	6	..	661	6
Oregon	8	153	15	3	22	39	..	3	16	..	466	..
Pennsylv'nia	111	1,526	220	168	167	200	5	120	188	511	7,613	94
R. Island	12	160	36	20	6	21	..	6	6	..	558	19
S. Carolina	3	49	6	10	6	10	..	1	14	..	366	..
S. Dakota	5	49	7	18	16	10	5	2	15	..	127	..
Tennessee	6	84	13	15	44	21	3	3	22	..	708	..
Texas	24	187	45	64	402	85	2	17	61	8	1,995	2
Utah	12	18	..	17	10	8	8	..	5	..	166	..
Vermont	4	42	9	7	6	6	..	..	4	..	161	..
Virginia	5	129	12	30	8	33	..	5	23	2	683	..
Washington	12	301	37	24	27	51	3	13	31	..	828	2
W. Virginia	2	85	23	13	19	23	..	1	37	..	790	..
Wisconsin	28	428	91	56	84	49	3	8	55	1	1,577	..
Wyoming	..	18	2	3	30	2	..	1	3	1	60	..
U. S.	1,436	15,065	2,341	2,046	3,169	2,442	192	664	1,699	1,450	65,127	1,677

EXPENDITURES FOR PLANT AND EQUIPMENT IN THE BAKERY PRODUCTS INDUSTRY IN THE UNITED STATES: 1939

		"Bread and other bakery products (except biscuit, crackers and pretzels)" industry—Reported by bakeries classified as—			"Biscuit, crackers and pretzels" industry
	Total for the industries	Total for the industry	Wholesale only	Retail only	Wholesale and retail combined	
Number of establishments—Total for the industry	18,399	18,043	2,569	8,978	6,496	356
Reporting expenditures for plant and equipment	8,511	8,304	1,494	3,271	3,539	207
Value of products—Total for the industry	$1,411,816,633	$1,211,023,755	$384,763,786	$267,005,930	$559,254,039	$200,792,878
Reporting expenditures for plant and equipment	1,109,419,601	940,621,825	326,265,406	155,030,057	459,326,362	168,797,776
Expenditures for plant and equipment—Total for the industry	40,011,629	36,118,781	12,105,645	7,114,699	16,898,437	3,892,848
Expenditures for new construction or major alterations of buildings and other fixed plant and structures	9,336,584	8,345,396	2,676,667	2,063,959	3,604,770	991,188
Expenditures for new machinery and operating equipment	27,517,329	24,803,008	8,233,328	4,413,334	12,156,346	2,714,321
Expenditures for plant and equipment acquired in a "used" condition from other owners and expenditures for land	2,126,597	1,982,019	737,521	419,949	824,549	144,578
Expenditures, unclassified	1,031,119	988,358	458,129	217,457	312,772	42,761

UNITED STATES CENSUS BUREAU SUMMARY OF MATERIALS USED IN BAKERIES

Principal Materials Consumed in the "Bread and Other Bakery Products (Except Biscuit, Crackers and Pretzels)" Industry and in the "Biscuit, Crackers and Pretzels" Industry Combined by Kind, Quantity, and Cost, by States: 1939

(The combined value of products reported by the 17,516 establishments that supplied detailed data on materials consumed amounted to $1,384,805,764, or 98.1% of the total value of products for the two industries.)

FLOUR

State—	Number of units: Bread industry	Number of units: Biscuit industry	Wheat flour: Total: Barrels	Wheat flour: Total: Cost	Wheat flour: White: Barrels	Wheat flour: White: Cost	Wheat flour: Whole wheat (including graham): Barrels	Wheat flour: Whole wheat (including graham): Cost	Rye flour: Barrels	Rye flour: Cost	Other flour: Barrels	Other flour: Cost
"Biscuit, crackers and pretzels" industry ..			5,692,597	$21,371,440								
"Bread and other bakery products" industry..			41,291,437	$194,247,502	38,191,897	$176,148,554	36,350,191	$167,324,808	1,841,706	$8,823,746	1,681,405	$7,518,718	1,418,135	$10,580,230
United States	17,172	344	46,984,034	$215,618,942	43,817,485	$197,247,652	41,867,968	$188,033,486	1,949,517	$9,214,166	1,706,921	$7,602,757	1,459,628	$10,768,533
Alabama	72	4	339,112	1,493,417	336,023	1,473,709	327,418	1,431,884	8,605	41,825	657	3,331	2,432	16,377
Arizona	51	...	120,784	592,206	117,964	573,230	109,783	530,321	8,181	42,909	609	3,455	2,211	15,521
Arkansas	58	4	243,910	954,073	238,992	921,136	234,189	899,340	4,803	21,796	754	3,717	4,164	29,220
California	1,173	28	2,903,541	13,049,966	2,769,802	12,145,997	2,538,529	11,121,758	231,273	1,024,239	53,912	261,720	79,827	642,249
Colorado	139	3	383,958	1,555,681	372,556	1,488,347	351,557	1,404,247	20,999	84,100	4,960	20,822	6,442	46,512
Connecticut	358	...	661,080	3,431,463	592,777	2,989,685	560,265	2,822,756	32,512	166,929	44,026	212,734	24,277	229,044
Delaware	32	...	84,545	421,450	80,971	400,147	77,515	382,991	3,456	17,156	2,616	13,247	958	8,056
District of Columbia	81	...	367,890	1,704,928	348,342	1,588,471	334,468	1,520,017	13,874	68,454	12,865	70,288	6,683	46,169
Florida	150	2	472,404	2,270,253	449,469	2,121,339	422,407	1,980,051	27,062	141,288	8,020	39,983	14,915	108,931
Georgia	100	2	464,192	2,147,799	457,574	2,104,736	445,690	2,042,443	11,884	62,293	2,658	14,180	3,960	28,883
Idaho	63	...	86,201	412,666	84,244	396,556	75,235	355,268	9,009	41,288	549	2,754	1,408	13,356
Illinois	1,519	23	3,718,637	15,803,316	3,382,710	14,101,007	3,254,009	13,519,530	128,701	581,477	198,639	768,703	137,288	933,606
Indiana	362	6	1,261,028	5,496,165	1,220,798	5,244,684	1,187,500	5,089,542	33,298	155,142	15,668	64,525	24,562	186,946
Iowa	256	8	981,071	3,748,536	935,490	3,520,623	97,787	3,364,035	37,703	156,588	14,274	52,071	31,307	175,842
Kansas	185	2	407,955	1,574,199	397,309	1,496,359	377,838	1,413,749	19,471	82,610	2,084	9,420	8,562	68,420
Kentucky	112	2	456,539	2,081,817	445,184	1,993,139	435,800	1,945,652	9,384	47,487	3,988	17,319	7,367	71,359
Louisiana	214	7	596,034	2,706,611	588,984	2,665,273	576,719	2,599,233	13,265	66,040	2,155	11,503	4,895	29,835
Maine	88	1	265,490	1,278,819	252,552	1,169,474	245,206	1,132,869	7,346	36,605	3,458	15,775	9,480	93,570
Maryland	294	6	904,823	4,206,680	854,289	3,871,971	829,479	3,759,898	24,810	112,073	18,819	79,134	31,715	255,575
Massachusetts	1,034	14	2,465,892	12,053,366	2,287,915	10,781,124	2,195,738	10,289,719	92,177	491,405	80,710	389,447	97,267	882,795
Michigan	661	13	2,280,392	10,336,946	2,104,282	9,175,916	1,985,298	8,611,095	118,984	564,821	84,485	399,524	91,625	761,506
Minnesota	432	11	790,358	3,466,805	731,700	3,191,214	692,408	3,019,004	39,292	172,210	31,677	106,976	26,981	168,615
Mississippi	49	2	145,301	633,836	143,649	624,401	139,634	602,734	4,015	21,667	341	1,761	1,311	7,674
Missouri	456	13	1,720,705	6,746,355	1,669,396	6,478,598	1,614,176	6,250,775	55,220	227,823	30,490	124,279	20,819	143,478
Montana	84	...	123,935	670,344	117,305	631,258	108,730	584,218	8,575	47,040	2,224	11,812	4,406	27,274
Nebraska	34	4	396,817	1,668,825	376,943	1,557,354	362,852	1,496,446	14,091	60,908	12,143	54,177	7,731	57,294
Nevada	18	...	23,168	114,013	21,463	103,137	19,806	94,737	1,657	8,400	313	1,725	1,392	9,151
New Hampshire	55	1	148,302	720,874	133,685	617,835	127,475	588,745	6,210	29,090	5,004	24,817	9,613	76,222
New Jersey	973	11	2,105,655	10,559,519	1,836,398	9,168,128	1,748,762	8,708,031	87,636	460,097	156,649	728,058	112,608	663,333
New Mexico	39	...	57,954	265,099	56,066	253,833	51,955	233,545	4,111	20,288	955	5,295	933	5,971
New York	2,815	25	7,115,848	35,138,377	6,273,316	30,495,549	5,967,567	29,002,584	305,749	1,492,965	527,913	2,394,178	314,619	2,248,650
North Carolina	92	1	421,804	2,021,313	414,756	1,968,576	404,249	1,914,268	10,507	54,308	1,046	5,059	6,002	47,678
North Dakota	57	1	99,366	488,295	96,199	471,212	91,879	449,214	4,320	21,998	1,523	6,594	1,644	10,489
Ohio	1,027	21	3,414,510	16,084,606	3,206,012	14,728,662	3,091,712	14,178,903	114,300	549,759	106,302	480,755	102,196	875,189
Oklahoma	211	2	444,177	1,875,485	435,630	1,816,318	413,234	1,716,550	22,396	99,768	2,618	10,946	5,929	48,221
Oregon	162	5	342,723	1,569,328	329,011	1,491,423	296,157	1,337,304	32,854	154,119	7,793	36,914	5,919	40,991
Pennsylvania	1,439	81	4,585,251	21,623,736	4,282,542	19,968,453	4,120,476	19,183,919	162,066	784,534	155,190	699,185	147,519	956,098
Rhode Island	156	...	363,935	1,770,479	345,642	1,653,825	337,620	1,612,812	8,022	41,013	6,777	30,152	11,516	86,502
South Carolina	33	2	189,450	859,920	187,653	849,292	183,451	827,041	4,202	22,251	1,200	5,475	597	5,153
South Dakota	81	1	128,459	611,121	121,689	563,670	115,509	534,615	6,180	29,055	2,302	10,595	4,468	36,856
Tennessee	109	6	578,290	2,454,179	573,225	2,423,596	562,068	2,371,071	11,157	52,525	2,010	10,380	3,055	20,203
Texas	519	6	1,489,957	6,117,142	1,465,668	5,983,605	1,410,584	5,741,926	55,084	241,679	12,485	54,741	11,804	78,796
Utah	30	2	154,645	667,766	152,637	656,309	143,619	619,643	9,018	36,666	906	4,277	1,102	7,180
Vermont	47	1	89,642	470,707	84,013	427,948	79,874	404,634	4,139	23,314	1,677	8,309	3,952	34,450
Virginia	111	2	510,331	2,343,558	502,118	2,289,799	489,989	2,227,615	12,129	62,184	2,464	11,818	5,749	41,941
Washington	317	16	621,219	2,759,802	598,018	2,616,957	537,264	2,351,100	60,754	265,857	11,984	58,981	11,217	83,864
West Virginia	105	...	398,869	1,921,785	391,242	1,881,609	384,530	1,845,377	6,712	36,232	2,541	10,712	5,086	29,464
Wisconsin	577	5	1,008,619	4,473,291	907,853	3,927,403	71,304	3,759,070	36,549	168,333	62,030	241,732	38,736	304,156
Wyoming	42	...	49,266	202,025	45,429	184,765	39,654	161,207	5,775	23,558	2,458	9,392	1,379	7,868

BAKERY PRODUCTS, BY KIND, QUANTITY AND VALUE, FOR THE UNITED STATES: 1939, 1937 AND 1929

The detailed statistics in this table were compiled from returns made by establishments which reported the following percentages of the total value of products of the industries: For the "Bread and other bakery products (except biscuit, crackers and pretzels)" industry—1939, 16,952 establishments, or 97.9%; 1937, 14,785 establishments, or 94.4%; 1929, 9,834 establishments, or 89.5%. For the "Biscuit, crackers and pretzels" industry—1939, 351 establishments, or 99.9%; 1937, 319 establishments, or 100%; 1929, 375 establishments, or 100%. See "Detailed statistics of products, materials consumed, and equipment."

Product—	Reported for 1939 by—Bakeries in the "bread and other bakery products (except biscuit, crackers and pretzels)" industry, classified as—: Wholesale only	Retail only	Wholesale and retail combined	Total for the industry	Bakeries in the "Biscuit, crackers and pretzels" industry	Total for the industries: 1939	1937	1929
Bakery products subgroup of industries, all products, total value	$384,763,786	$267,005,930	$559,254,039	$1,211,023,755	$200,792,878	$1,411,816,633	$1,426,162,859	$1,526,119,811
Bakery products reported in detail	379,372,065	251,160,995	543,192,811	1,173,725,871	198,012,501	1,371,738,372	1,350,046,989	1,381,515,707
Bakery and other products not reported in detail	3,640,128	10,680,742	11,574,925	25,895,795	152,576	26,048,371	68,313,178	131,496,197
Miscellaneous products	591,371	1,230,118	1,956,579	3,778,068	1,339,067	5,117,135		
Other products (not classified in these industries)*	137,576	3,241,018	1,234,601	4,613,195	1,196,419	5,809,614		
Receipts for contract work	135,759	19,572	47,396	202,727	.....	202,727	7,802,692	13,098,907
Merchandise (goods bought and sold without processing)	886,887	673,485	1,247,727	2,808,099	92,315	2,900,414		
Bakery products reported in detail, total†	379,372,065	251,160,995	543,192,811	1,173,725,871	198,012,501	1,371,738,372	1,350,046,989	1,381,515,707
Bread and other yeast-raised products—Total pounds	3,704,358,099	1,459,530,709	5,284,226,671	10,448,115,479	32,834,814	10,480,950,293	10,024,230,456	
Total value	$263,568,431	$138,211,167	$393,700,656	$795,480,254	$1,813,843	$797,294,097	$796,708,801	
White pan bread—Pounds	2,747,649,665	783,796,137	3,662,380,854	7,193,826,656	25,016,615	7,218,843,271	6,923,658,789	
Value	$181,471,944	$61,676,446	$247,140,308	$490,288,698	$1,232,043	$491,520,741	$504,654,551	
Whole-wheat, rye and hearth breads—Pounds	511,469,143	288,770,338	926,508,675	1,726,748,156	4,476,872	1,731,225,028	1,770,040,370	9,864,221,325
Value	$36,032,558	$23,728,754	$68,171,813	$127,933,125	$277,293	$128,210,418	$133,893,595	$762,352,193
Variety or specialty breads—Pounds	134,750,898	96,814,211	230,262,633	461,827,742	752,622	462,580,364	367,142,387	
Value	$10,217,764	$8,697,634	$18,458,879	$37,374,277	$53,494	$37,427,771	$32,814,572	
Rolls and coffee cake—Pounds	310,488,393	290,150,023	465,074,509	1,065,712,925	2,588,705	1,068,301,630	963,388,910	
Value	$35,846,165	$44,108,333	$59,929,656	$139,884,154	$251,013	$140,135,167	$125,346,083	
Crackers, biscuit (not including raised biscuit), sponge goods, sweet goods, machine-made cookies, etc.: Pounds	31,329,086	34,853,655	54,954,087	121,136,828	1,490,421,526	1,611,558,354	1,504,385,833	1,348,790,253
Value	$3,718,659	$5,797,147	$9,105,911	$18,621,717	$189,070,963	$207,692,680	$212,099,650	$263,499,172
Pretzels—Pounds	3,929,417	573,751	538,866	5,042,034	47,289,362	52,331,396	50,380,464	45,303,341
Value	$586,063	$92,751	$87,851	$766,665	$5,295,773	$6,062,438	$5,740,989	$7,271,488
Soft cakes: All types of cakes—pound, layer, package, fruit, etc.—Pounds	316,137,820	211,441,719	420,496,216	948,075,755	5,118,903	953,194,658	970,875,921	
Value	$56,055,015	$49,196,886	$79,193,495	$184,945,396	$1,185,854	$186,131,250	$184,770,109	$233,351,501
Cookies (hand-made)—Pounds	15,331,212	48,923,127	42,741,356	106,995,695	4,990,710	111,986,405	97,374,770	
Value	$2,484,340	$9,220,698	$7,452,234	$19,157,272	$558,840	$19,716,112	$16,845,974	
Doughnuts, crullers and other fried cakes—Dozens	90,326,373	88,427,442	156,439,689	335,193,504	825,109	336,018,613	258,332,897	201,091,442
Value	$13,701,656	$16,823,865	$24,764,100	$55,289,621	$85,239	$55,374,860	$44,424,126	$40,130,188
Pies, value	$34,385,825	$18,835,082	$21,898,541	$75,119,448	$1,589	$75,121,037	$71,663,486	$74,908,165
Pastries (French and Danish), cream puffs, etc., value	$4,372,076	$12,983,399	$6,990,023	$24,345,498	$400	$24,345,898	$17,793,854	‡.....

*Ice cream; ice cream cones and wafers; confectionery; macaroni, spaghetti and vermicelli; egg noodles and other egg products; baked beans. †In addition, bakery products were reported as secondary products by establishments classified in other industries, value as follows: For 1939, $1,165,616; for 1937, $2,070,550; for 1929, $3,407,319. ‡No data.

UNITED STATES BAKERY PRODUCTS, BY KIND, QUANTITY AND VALUE, BY STATES—1939

Statistics tabulated by the United States Department of Commerce from United States Census Bureau returns made by 17,303 establishments that reported 98.2% of the total value of products for the baking industry:

State—	Aggregate value of products for the industries	Total value	BAKERY PRODUCTS REPORTED IN DETAIL									
			Bread and other yeast-raised products									
			Total		White pan bread		Wh. wh't, rye, hearth breads		Variety or specialty breads		Rolls and coffee cake	
			Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
United States	†$1,411,816,633	$1,371,738,372	10,480,950,293	$797,294,097	7,218,843,271	$491,520,741	1,731,225,028	$128,210,418	462,580,364	$37,427,771	1,068,301,630	$140,135,167
Alabama	10,062,910	9,625,283	79,686,621	5,900,413	63,922,145	4,551,770	4,920,561	361,251	1,384,828	114,101	9,459,087	873,291
Arizona	3,349,696	3,303,698	34,339,759	2,659,440	21,450,533	1,523,645	8,226,794	622,136	835,370	71,236	3,827,062	442,423
Arkansas	5,881,256	5,791,893	54,658,747	3,675,151	46,116,625	2,981,614	4,078,076	313,484	1,314,856	86,360	3,149,190	293,693
California	90,534,899	88,978,007	675,135,832	52,681,437	391,258,675	27,694,600	162,175,938	11,766,586	69,699,025	5,762,487	52,002,194	7,457,764
Colorado	11,316,844	11,013,920	86,561,959	5,923,116	54,793,633	3,370,207	19,715,060	1,233,124	3,840,493	285,811	8,212,773	1,033,974
Connecticut	20,489,862	19,637,830	157,597,594	12,183,932	100,501,250	6,797,366	33,235,459	2,536,730	6,795,764	596,025	17,065,121	2,253,811
Delaware	2,392,993	2,318,121	25,743,442	1,912,234	18,250,702	1,220,319	3,840,436	276,626	771,206	69,174	2,881,098	346,115
District of Columbia	11,567,426	11,280,086	101,376,264	7,979,381	72,212,885	5,217,227	14,233,406	1,099,054	3,056,581	267,336	11,873,392	1,395,764
Florida	14,304,575	13,507,398	132,679,582	10,167,205	93,787,957	6,780,351	18,752,773	1,424,720	6,800,221	615,965	13,338,631	1,346,169
Georgia	14,580,578	14,391,300	100,645,199	7,627,923	80,578,799	5,897,686	6,600,223	507,137	2,186,528	185,174	11,279,649	1,037,926
Idaho	2,498,370	2,452,963	24,357,668	1,940,375	18,684,579	1,385,015	3,690,004	278,044	665,868	65,610	1,317,217	211,706
Illinois	119,681,077	117,367,402	744,229,967	59,062,327	454,562,221	30,655,794	151,737,401	11,053,503	38,521,716	3,129,091	99,408,629	14,223,939
Indiana	31,893,060	30,793,735	210,330,866	21,994,410	251,140,533	16,231,070	30,254,711	2,283,818	6,442,641	475,655	22,492,981	3,003,867
Iowa	22,415,463	21,688,519	223,022,166	14,534,237	172,376,402	10,106,017	28,866,221	1,912,958	6,456,256	517,435	15,323,287	1,997,827
Kansas	8,840,661	8,583,954	96,836,879	6,683,321	75,034,456	4,947,860	13,131,224	852,462	3,242,157	238,869	5,429,042	644,130
Kentucky	11,354,208	11,149,153	104,162,700	7,285,800	86,117,200	5,282,696	8,365,322	652,885	1,639,804	139,122	8,040,374	1,111,097
Louisiana	14,517,523	14,293,885	136,983,498	9,435,184	109,968,231	7,455,747	16,073,376	1,117,798	5,672,927	382,759	4,268,964	478,880
Maine	7,550,164	7,173,343	61,551,533	4,047,047	52,330,712	3,267,811	5,466,891	371,416	1,142,407	83,153	2,611,523	324,667
Maryland	25,658,825	25,197,288	195,560,552	13,812,939	152,260,669	10,017,231	22,994,668	1,650,132	7,476,836	597,419	12,828,379	1,548,157
Massachusetts	79,360,194	75,075,769	502,215,751	36,674,768	360,241,102	23,785,991	78,555,375	5,811,023	25,642,890	2,141,577	37,776,384	4,936,177
Michigan	63,885,026	62,188,075	501,286,812	36,848,747	334,123,045	21,391,984	86,040,448	6,446,028	28,235,290	2,132,814	52,888,029	6,877,921
Minnesota	24,721,835	23,968,614	176,813,250	14,638,796	128,676,296	9,390,353	25,135,471	1,990,989	4,271,661	391,239	18,729,322	2,866,215
Mississippi	3,909,516	3,782,651	43,883,723	3,076,806	35,299,989	2,420,563	3,219,700	220,581	388,919	28,711	4,975,115	406,951
Missouri	44,721,703	43,982,421	363,347,962	24,626,306	273,248,758	16,533,592	44,274,302	3,112,779	15,542,289	1,069,338	30,282,613	3,910,597
Montana	4,020,290	3,848,102	38,282,739	3,058,830	29,518,839	2,214,071	5,277,640	412,996	1,220,753	110,824	2,265,507	320,939
Nebraska	10,559,601	10,336,922	95,443,548	6,779,594	68,515,982	4,262,850	16,411,288	1,117,886	1,985,374	166,034	8,530,904	1,232,824
Nevada	620,791	574,416	4,716,995	393,498	3,021,613	237,644	965,603	76,700	326,987	28,732	402,792	50,422
New Hampshire	4,300,639	3,978,551	37,018,584	2,636,444	28,872,583	1,912,045	3,796,385	285,122	2,179,850	172,484	2,169,766	266,793
New Jersey	65,750,757	62,789,888	449,876,277	36,464,353	261,048,406	18,444,481	87,722,041	6,352,735	33,779,328	2,746,939	67,326,502	8,920,198
New Mexico	1,756,121	1,672,593	16,205,021	1,362,278	12,411,595	1,000,546	2,069,703	176,705	594,192	54,407	1,129,531	130,620
New York	242,882,633	237,487,344	1,462,827,344	121,045,746	832,228,367	60,118,577	323,447,307	24,091,356	72,519,656	5,686,380	234,632,014	31,149,433
North Carolina	12,712,219	12,452,691	116,462,638	8,929,412	98,242,755	7,226,890	4,772,515	345,176	2,131,400	198,884	11,315,968	1,158,462
North Dakota	2,913,920	2,848,982	23,368,052	1,867,379	17,436,034	1,290,549	2,954,403	226,067	414,447	36,871	2,563,168	313,892
Ohio	103,602,199	100,782,623	757,744,663	58,641,807	525,735,164	35,212,978	134,187,191	10,466,431	20,987,154	1,842,369	76,835,154	11,120,029
Oklahoma	10,621,788	10,315,904	110,616,609	7,735,318	88,120,377	5,969,911	14,910,540	990,717	1,760,628	147,900	5,825,064	626,790
Oregon	10,682,384	10,161,809	85,457,796	7,036,940	57,360,729	4,409,710	18,608,127	1,492,232	3,983,405	350,446	5,505,535	784,552
Pennsylvania	141,975,441	137,298,658	1,009,642,714	78,351,455	712,858,251	50,203,068	161,851,093	12,449,358	35,465,731	2,858,094	99,467,639	12,840,935
Rhode Island	10,110,978	9,775,242	93,551,677	6,532,200	72,224,447	4,771,558	14,397,582	1,006,073	3,097,527	247,934	3,832,121	506,635
South Carolina	6,190,938	5,958,577	48,567,171	3,808,428	39,694,002	3,002,067	2,374,813	174,722	707,101	57,940	5,791,255	573,699
South Dakota	3,861,346	3,753,522	27,657,085	2,133,395	20,369,919	1,441,019	3,623,919	270,240	1,321,023	133,705	2,342,224	288,431
Tennessee	15,732,722	15,487,497	138,099,910	9,229,550	114,509,429	7,286,435	7,850,121	528,093	3,377,912	231,652	12,362,448	1,183,370
Texas	37,155,907	36,401,191	372,578,513	25,153,908	315,987,623	20,311,856	30,391,044	2,165,708	10,402,771	820,502	15,797,075	1,855,842
Utah	4,243,093	4,089,638	38,536,766	2,655,109	28,093,348	1,782,345	6,883,388	453,764	1,038,787	81,171	2,520,243	337,829
Vermont	2,254,874	2,162,484	22,674,795	1,623,006	17,813,077	1,198,090	2,887,972	208,531	571,366	44,794	1,402,380	171,591
Virginia	13,989,146	13,329,625	115,790,320	8,407,089	97,481,465	6,630,105	5,872,467	418,234	2,284,953	170,105	10,151,435	1,188,645
Washington	19,157,696	18,807,119	142,930,455	11,629,410	88,511,028	6,736,338	31,829,241	2,427,593	11,614,414	1,003,612	10,975,772	1,461,867
West Virginia	10,663,210	10,297,117	112,066,701	8,073,033	97,025,828	6,724,409	8,809,527	666,933	1,104,332	91,931	5,127,014	589,760
Wisconsin	29,253,726	28,370,035	217,706,305	17,450,640	137,138,489	9,509,456	43,801,182	3,364,641	7,168,576	654,781	29,598,058	3,921,762
Wyoming	1,315,075	1,212,534	11,120,289	923,980	7,686,524	617,234	1,946,096	147,141	516,164	42,819	971,505	116,786

BAKERY PRODUCTS REPORTED IN DETAIL—Continued

State—	Crackers, biscuit (not including raised biscuit), sponge goods, sweet goods, machine-made cookies, etc.		Pretzels		Soft cakes						Pastries (French and Danish), cream puffs, etc., value	Bakery and other products not reported in detail, value	Other products, etc., value‡
					All types of cake—pound, layer, package, fruit, etc.		Cookies (hand-made)		Doughnuts, crullers, and other fried cakes				
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Dozens	Value	Pies, value		
United States	1,611,558,354	$207,692,680	52,331,896	$6,062,438	953,194,658	$186,131,250	111,986,405	$19,716,112	336,018,613	$55,374,860	$75,121,037	$24,345,898	$26,048,371	$14,029,890
Alabama	13,771,200	1,651,685	.....	.....	10,088,708	1,775,334	140,484	25,625	751,210	109,968	134,759	27,499	306,014	131,613
Arizona	*.....	*.....	.....	.....	744,035	141,077	198,109	31,812	854,990	177,011	257,924	*.....	.....	45,998
Arkansas	8,264,663	824,394	.....	.....	4,661,756	765,483	*.....	*.....	816,219	137,871	94,007	*.....	64,147	25,216
California	70,994,310	10,579,874	39,826	5,662	56,748,324	11,491,992	7,940,713	1,492,397	19,074,871	3,785,546	7,276,893	1,664,206	1,137,165	419,727
Colorado	*.....	*.....	.....	.....	4,631,412	865,024	628,539	107,004	2,784,779	470,308	552,316	*.....	274,989	27,935
Connecticut	803,778	119,616	*.....	*.....	12,317,017	2,334,840	1,883,497	283,594	8,564,051	1,390,448	2,792,383	*.....	709,484	142,548
Delaware	176,522	29,386	.....	.....	307,166	82,463	83,898	24,388	918,537	155,783	92,161	21,706	*.....	*.....
Dist. of Columbia	1,697,847	179,039	*.....	*.....	8,440,426	1,659,942	260,282	72,666	1,995,450	374,077	860,193	*.....	65,133	222,207
Florida	1,575,828	234,096	.....	.....	11,545,834	2,120,748	552,232	95,905	2,153,536	316,722	436,164	136,558	707,747	89,430
Georgia	*.....	*.....	*.....	*.....	16,993,489	2,613,089	291,667	61,102	1,117,755	206,386	306,036	54,243	148,846	40,432
Idaho	148,655	24,243	.....	.....	1,032,652	203,706	360,915	55,027	539,254	107,879	96,545	25,188	*.....	*.....
Illinois	226,155,032	28,252,446	439,274	58,884	72,268,828	13,979,630	10,140,762	1,877,049	25,942,580	4,422,562	8,006,011	1,708,493	1,406,740	906,935
Indiana	29,751,992	3,272,367	127,330	16,891	10,984,619	2,161,518	3,121,796	462,182	9,137,447	1,398,992	1,101,087	386,288	967,994	131,331
Iowa	55,509,094	4,824,061	8,830	1,718	4,667,826	916,516	1,695,989	279,306	4,256,993	695,625	326,747	110,309	436,466	290,478
Kansas	*.....	*.....	.....	.....	1,853,700	345,829	766,187	114,206	1,532,350	257,927	541,472	*.....	191,458	65,249
Kentucky	*.....	*.....	.....	.....	8,129,458	1,331,573	510,724	109,436	3,044,156	462,359	513,184	*.....	138,999	66,056
Louisiana	14,960,451	2,500,420	*.....	*.....	6,549,241	1,219,742	948,687	142,701	1,759,679	264,905	643,821	*.....	148,413	75,225
Maine	*.....	*.....	.....	.....	3,563,696	725,154	443,983	78,406	5,207,027	946,151	*.....	85,729	*.....	*.....
Maryland	28,422,879	3,705,841	*.....	*.....	22,115,635	4,064,709	598,083	117,986	9,011,032	1,206,107	1,724,654	*.....	65,879	395,658
Massachusetts	98,133,777	12,818,088	*.....	*.....	69,397,468	13,173,410	5,135,752	991,549	32,840,550	5,637,223	4,209,993	*.....	2,645,384	1,639,041
Michigan	79,245,310	9,102,338	127,369	20,052	38,677,909	7,084,328	7,821,149	1,400,609	23,806,151	3,381,184	3,747,747	603,070	1,510,656	186,295
Minnesota	33,160,705	3,627,956	*.....	*.....	12,418,073	2,640,940	2,908,848	490,936	7,104,480	1,259,741	975,400	*.....	295,279	457,942
Mississippi	*.....	*.....	.....	.....	2,704,416	427,011	210,897	32,612	292,532	51,245	63,482	*.....	109,530	17,335
Missouri	86,509,460	9,572,898	*.....	*.....	31,104,934	5,891,865	1,774,083	304,827	7,839,695	1,113,158	1,786,961	*.....	461,672	277,610
Montana	91,277	15,810	*.....	*.....	2,092,649	367,397	846,362	142,350	669,486	132,144	.....	*.....	94,528	77,660
Nebraska	11,538,920	1,417,868	.....	.....	5,735,523	1,187,224	1,493,933	211,756	1,673,576	278,567	401,026	60,887	93,575	129,104
Nevada	*.....	*.....	.....	.....	251,277	59,060	*.....	*.....	254,086	44,672	35,565	16,402	*.....	*.....
New Hampshire	115,368	22,423	.....	.....	2,695,681	489,681	220,322	41,722	2,974,170	559,629	138,756	89,896	240,323	81,765
New Jersey	77,111,677	7,134,595	1,757,885	190,946	52,208,966	10,309,926	4,190,444	793,975	15,049,313	2,502,728	3,843,490	1,549,875	2,041,063	919,806
New Mexico	*.....	*.....	.....	.....	426,516	84,658	130,356	24,178	402,713	70,107	86,813	*.....	*.....	*.....
New York	250,970,486	41,422,530	1,616,268	218,598	181,675,660	38,264,353	21,601,021	3,948,805	57,600,457	9,612,991	13,943,108	9,031,213	2,941,066	2,454,283
North Carolina	*.....	*.....	*.....	*.....	14,038,897	2,549,159	364,578	66,505	1,394,649	221,136	327,149	91,040	204,994	54,534
North Dakota	*.....	*.....	.....	.....	436,916	86,758	328,640	54,746	430,255	77,752	24,267	*.....	47,089	17,849
Ohio	136,735,132	18,303,144	4,495,271	590,370	59,267,391	11,634,432	7,649,772	1,458,049	25,555,536	3,847,012	5,102,077	1,205,732	1,800,342	1,019,709
Oklahoma	*.....	*.....	*.....	*.....	4,409,712	876,501	812,458	149,644	1,564,593	288,016	549,163	97,333	240,512	65,372
Oregon	8,179,202	1,141,234	*.....	*.....	2,897,587	703,436	938,707	166,382	2,262,069	407,665	535,971	*.....	426,291	94,284
Pennsylvania	123,051,401	16,683,067	32,572,041	3,940,160	118,285,774	23,309,121	10,561,368	1,846,386	23,845,017	3,851,180	7,680,854	1,636,435	2,854,029	1,822,754
Rhode Island	285,532	40,453	.....	.....	8,678,550	1,573,219	740,295	144,864	5,362,615	786,032	521,688	176,786	225,615	110,121
South Carolina	*.....	*.....	.....	.....	8,791,430	1,250,642	*.....	*.....	202,255	34,961	29,837	*.....	131,001	101,360
South Dakota	*.....	*.....	.....	.....	489,884	100,400	537,230	82,578	854,123	122,418	66,402	*.....	37,543	70,281
Tennessee	24,111,312	2,868,420	*.....	*.....	13,754,319	2,450,806	1,302,568	200,666	1,389,744	212,319	491,682	*.....	*.....	*.....
Texas	35,999,805	4,588,508	*.....	*.....	19,518,062	3,673,544	3,742,654	578,136	3,914,520	628,248	1,430,550	*.....	336,897	417,819
Utah	6,050,145	732,114	*.....	*.....	2,451,321	434,635	76,499	14,950	468,037	108,018	127,997	*.....	*.....	*.....
Vermont	*.....	*.....	.....	.....	794,648	168,538	183,863	29,018	1,053,146	197,698	75,189	*.....	*.....	*.....
Virginia	*.....	*.....	.....	.....	10,349,201	1,960,112	265,365	47,067	1,635,059	255,904	740,673	*.....	585,022	74,499
Washington	23,849,994	2,856,558	.....	.....	10,892,837	2,201,140	1,875,409	303,370	4,144,546	742,872	828,381	191,388	298,884	51,693
West Virginia	377,357	54,582	.....	.....	7,203,766	1,499,451	305,006	47,433	854,514	156,708	433,743	32,167	252,577	113,516
Wisconsin	36,962,633	4,118,316	*.....	*.....	13,397,200	2,795,461	2,064,813	383,076	10,739,636	1,838,983	788,520	*.....	673,022	210,669
Wyoming	*.....	*.....	*.....	*.....	514,269	85,673	142,482	22,565	379,174	67,922	65,571	36,931	95,798	6,743

*Data for specified products withheld for this state to avoid disclosing, exactly or approximately, the production of individual establishments, but are included in the "Total value" column for "Bakery products reported in detail," and in the United States total for the specified items. †Does not include the value of bakery goods ($1,165,616) made as secondary products by establishments classified in other industries. ‡Miscellaneous products, receipts for contract work, merchandising (goods bought and sold without processing).

UNITED STATES CENSUS BUREAU SUMMARY OF MATERIALS USED IN BAKERIES

Principal Materials Consumed in the "Bread and Other Bakery Products (Except Biscuit, Crackers and Pretzels)" and the "Biscuit, Crackers and Pretzels" Industries, by Kind, Quantity and Cost: 1939 and 1937

	1939			1937			1929
		Reported by bakeries classified in—			Reported by bakeries classified in—		
	Total for the industries	"Bread and other bakery products (except biscuit, crackers and pretzels)" industry*	"Biscuits, crackers and pretzels" industry†	Total for the industries	"Bread and other bakery products (except biscuit, crackers and pretzels)" industry‡	"Biscuit, crackers and pretzels" industry¶	Total for the industries‖
Flour—Total barrels	46,984,034	41,291,437	5,692,597	44,292,764	38,564,899	5,727,865	42,998,651
Total cost	$215,618,942	$194,247,502	$21,371,440	$266,479,439	$236,986,120	$29,493,319	$277,820,827
Wheat—Total barrels	43,817,485	38,191,897	5,625,588	41,515,936	35,862,039	5,653,897	39,994,507
Total cost	$197,247,652	$176,148,554	$21,099,098	$248,397,460	$219,238,030	$29,159,430	$257,894,674
White—Barrels	41,867,968	36,350,191	5,517,777	39,803,578	34,286,889	5,516,684	38,595,082
Cost	$188,033,486	$167,324,808	$20,708,678	$237,776,105	$209,283,743	$28,492,362	$248,625,455
Whole-wheat (including graham)—Barrels	1,949,517	1,841,706	107,811	1,712,363	1,575,150	137,213	1,399,425
Cost	$9,214,166	$8,823,746	$390,420	$10,621,355	$9,954,287	$667,068	$9,269,219
Rye—Barrels	1,706,921	1,681,405	25,516	1,559,038	1,524,139	34,899	1,592,561
Cost	$7,602,757	$7,518,718	$84,039	$8,314,216	$8,172,377	$141,839	$10,185,835
Other flour—Barrels	1,459,628	1,418,135	41,493	1,217,790	1,178,721	39,069	1,411,583
Cost	$10,768,533	$10,580,230	$188,303	$9,767,763	$9,575,713	$192,050	$9,740,318
Sugar—Total pounds	1,256,012,386	1,015,479,639	240,532,747	1,130,639,487	912,356,961	218,282,526	977,101,597
Cost	$58,948,204	$48,185,174	$10,763,030	$55,031,680	$44,596,500	$10,435,180	$52,701,215
Beet—Pounds	383,127,668	276,314,405	106,813,263	278,819,580	205,312,168	73,507,412	
Cost	$18,143,840	$13,269,147	$4,874,693	$13,874,603	$10,280,450	$3,594,153	
Cane—Pounds	742,210,826	620,608,362	121,602,464	749,449,194	610,655,996	138,793,198	
Cost	$35,682,368	$30,262,784	$5,419,584	$36,901,546	$30,315,071	$6,586,475	**....
Corn—Pounds	130,673,892	118,556,872	12,117,020	102,370,713	96,388,797	5,981,916	
Cost	$5,121,996	$4,653,243	$468,753	$4,255,531	$4,000,979	$254,552	
Corn syrup—Pounds	50,383,909	26,037,856	24,346,053	**....	**....	**....	
Cost	$1,679,643	$1,010,534	$669,109	$1,773,434	$985,885	$787,549	
Eggs, fresh, frozen or dried—Cost‖	$33,897,687	$33,026,557	$871,130	$32,834,612	$31,995,414	$839,198	$42,770,484
Butter—Pounds	39,181,843	36,707,009	2,474,834	55,571,347	41,493,065	14,078,282	50,056,612
Cost	$10,802,028	$10,178,732	$623,296	$13,303,242	$11,151,095	$2,152,147	$16,004,736
Oleomargarine—Pounds	31,017,544	20,425,230	10,592,314				
Cost	$3,446,082	$2,511,172	$934,910				
Lard—Pounds	284,171,707	234,920,531	49,251,176	175,712,844	154,374,199	21,338,645	253,383,204
Cost	$22,443,843	$19,017,387	$3,426,456	$21,157,668	$18,645,978	$2,511,690	$30,946,561
Shortenings other than lard—Pounds	411,379,490	327,466,498	83,912,992	441,635,789	339,189,633	102,446,156	259,361,964
Cost	$40,581,315	$33,704,621	$6,876,694	$52,600,847	$40,861,773	$11,739,074	$32,314,902
Milk—Total pounds	476,204,974	466,881,399	9,323,575	447,076,964	437,373,389	9,703,575	358,145,835
Total cost	$27,807,957	$27,233,317	$574,640	$28,048,241	$27,454,821	$593,420	$26,734,457
Fluid—Pounds	137,796,142	136,210,041	1,586,101	128,451,511	126,140,150	2,311,361	111,597,891
Cost	$5,487,688	$5,458,488	$29,200	$5,608,733	$5,571,523	$37,210	$5,789,361
Condensed and evaporated—Pounds	169,729,594	167,929,904	1,799,690	181,836,209	178,936,845	2,899,364	173,240,892
Cost	$9,655,898	$9,565,098	$90,800	$10,751,341	$10,568,759	$182,582	$13,521,529
Powdered—Pounds	168,679,238	162,741,454	5,937,784	136,789,244	132,296,394	4,492,850	73,307,052
Cost	$12,664,371	$12,209,731	$454,640	$11,688,167	$11,314,539	$373,628	$7,423,567
Malt extract—Pounds	40,175,756	36,943,795	3,231,961				52,033,547
Cost	$2,913,022	$2,717,547	$195,475	**....	**....	**....	$3,600,790
Fruit—Cost	$21,970,746	$20,676,327	$1,294,419				**....
Yeast—Pounds	147,770,275	146,000,986	1,769,289	139,209,757	137,555,500	1,654,257	108,304,924
Cost	$20,642,179	$20,402,348	$238,831	$21,789,360	$21,551,144	$238,216	$20,103,979
Salt—Pounds	189,205,224	161,863,248	27,341,976	**....	**....	**....	**....
Cost	$1,854,337	$1,613,811	$240,526				
Containers (boxes, cartons, paper wrappers, etc.), cost	$82,064,305	$62,138,361	$19,925,944	$74,576,203	$55,280,066	$19,296,137	**....

*Detailed data reported by 17,172 establishments, whose value of products amounted to 97.8% of the total value of products for the industry. †Detailed data reported by 344 establishments, whose value of products amounted to 99.8% of the total value of products for the industry. ‡Detailed data reported by 14,731 establishments, whose value of products amounted to 94.1% of the total value of products for the industry. ¶Detailed data reported by 306 establishments, whose value of products amounted to 99.7% of the total value of products for the industry. §Separate data for the two industries not available. Detailed data for the combined industries reported by 9,990 establishments, whose value of products amounted to 90.8% of the total value of products for the industries. **Data not available. ‖Figures for 1937 and 1929 reported as "Eggs, fresh, frozen or dried."

TOTAL AND PER CAPITA CONSUMPTION OF BAKERY PRODUCTS IN THE UNITED STATES FOR 1939

Compiled from United States Census Reports Made by 17,303 Establishments Representing 98.2% of the Total Value of the Commercial Baking Industry's Production Related to Bureau of the Census Population Estimates for 1940

	Bread and other yeast-raised products total, lbs sold	Per capita consumption lbs	White pan bread, lbs	Per capita consumption lbs	Whole wheat rye and hearth bread, lbs	Per capita consumption, lbs	Soft cakes, all types, lbs	Per capita consumption lbs
United States	10,480,950,293	79.7	7,218,843,271	54.9	1,731,225,028	13.1	953,194,658	7.2
Alabama	79,686,621	28.1	63,922,145	22.5	4,920,561	1.7	10,088,708	3.5
Arizona	34,339,759	68.9	21,450,533	43.0	8,226,794	16.5	744,035	1.5
Arkansas	54,658,747	28.0	46,116,625	23.6	4,078,076	2.0	4,661,756	2.4
California	675,135,832	98.2	391,258,675	56.9	162,175,938	23.6	56,748,324	8.3
Colorado	86,561,959	77.4	54,793,633	48.9	19,715,060	17.6	4,631,412	4.1
Connecticut	157,597,594	92.1	100,501,250	58.1	33,235,459	19.4	12,317,017	7.2
Delaware	25,743,442	96.7	18,250,702	68.5	3,840,436	14.4	307,166	1.2
District of Columbia	101,376,264	152.8	72,212,885	108.9	14,233,406	21.4	8,440,426	12.4
Florida	132,679,582	70.2	93,787,957	49.6	18,752,773	9.9	11,545,834	6.1
Georgia	100,645,199	32.2	80,578,799	25.8	6,600,223	2.1	16,993,489	5.4
Idaho	24,357,668	46.5	18,684,579	35.6	3,690,004	7.0	1,032,652	1.9
Illinois	744,229,967	94.4	454,562,221	57.7	151,737,401	19.1	72,268,823	9.1
Indiana	310,330,866	90.8	251,140,533	73.4	30,254,711	8.8	10,984,619	3.2
Iowa	223,022,166	87.9	172,376,402	67.9	28,866,221	11.3	4,667,826	1.8
Kansas	96,836,879	53.8	75,034,456	30.3	8,365,322	2.9	8,129,458	2.8
Kentucky	104,162,700	36.6	86,117,200	41.7	13,131,224	7.2	1,853,700	1.0
Louisiana	135,983,498	57.6	109,968,231	46.5	16,073,376	6.8	6,549,241	2.8
Maine	61,551,533	72.8	52,330,712	61.9	5,466,891	6.4	3,563,696	4.2
Maryland	195,560,552	107.4	152,260,669	84.5	22,994,668	12.6	22,115,635	12.2
Massachusetts	502,215,751	116.4	360,241,102	83.5	78,555,375	18.2	69,397,468	16.1
Michigan	501,286,812	95.5	334,123,045	63.7	86,040,448	16.4	38,677,909	7.3
Minnesota	176,813,250	63.4	128,676,296	46.1	25,135,471	8.9	12,418,073	4.4
Mississippi	43,883,723	20.0	35,299,989	16.1	3,219,700	1.4	2,704,416	1.2
Missouri	363,347,952	96.2	273,248,758	72.3	44,274,302	11.7	31,304,934	8.2
Montana	38,282,739	69.1	29,518,839	53.2	5,277,640	9.5	2,092,649	3.8
Nebraska	95,443,548	72.6	68,515,982	52.1	16,411,288	12.4	5,735,523	4.3
Nevada	4,716,995	42.7	3,021,613	27.4	965,603	8.7	251,277	2.2
New Hampshire	37,018,584	75.3	28,872,583	58.7	3,796,385	7.7	2,695,681	5.5
New Jersey	449,876,277	108.4	261,048,406	62.9	87,722,041	21.1	52,208,966	13.0
New Mexico	16,205,021	30.6	12,411,595	23.5	2,069,703	3.9	426,516	.8
New York	1,462,827,344	109.3	832,228,367	62.2	323,447,307	24.1	181,675,660	13.6
North Carolina	116,462,638	32.7	98,242,755	27.5	4,772,515	1.3	14,038,897	3.9
North Dakota	23,368,052	36.5	17,436,034	27.2	2,954,403	4.6	436,916	.6
Ohio	767,744,663	109.9	526,735,164	76.3	134,187,191	19.4	59,257,391	8.6
Oklahoma	110,616,609	47.3	88,120,377	37.7	14,910,540	6.3	4,409,712	1.9
Oregon	85,457,796	78.5	57,360,729	52.7	18,608,127	17.1	2,897,587	2.7
Pennsylvania	1,009,642,714	102.6	712,858,251	72.0	161,851,093	16.3	118,385,774	11.9
Rhode Island	93,551,677	131.1	72,224,447	101.2	14,397,582	20.1	8,678,550	12.1
South Carolina	48,567,171	25.4	39,694,002	20.8	2,374,813	1.2	8,791,430	4.6
South Dakota	27,657,085	43.1	20,369,919	31.7	3,623,919	5.6	489,884	.7
Tennessee	138,099,910	47.7	114,509,429	39.3	7,850,121	2.7	13,754,319	4.7
Texas	372,578,513	58.0	315,987,623	49.2	30,391,044	4.7	19,518,062	3.0
Utah	38,535,766	70.2	28,093,348	51.2	6,883,388	12.5	2,451,321	4.5
Vermont	22,674,795	63.1	17,813,077	49.6	2,887,972	8.0	794,648	2.2
Virginia	115,790,320	43.4	97,481,465	36.6	5,872,467	2.2	10,349,201	3.9
Washington	142,930,455	83.0	88,511,028	51.4	31,829,241	18.5	10,892,837	6.3
West Virginia	112,066,701	58.9	97,025,828	51.0	8,809,527	4.6	7,203,766	3.8
Wisconsin	217,706,305	69.6	137,138,489	43.8	43,801,182	14.0	13,397,200	4.2
Wyoming	11,120,289	45.0	7,685,524	31.1	1,946,096	7.8	514,269	2.0

Flour Package Equivalents

Number of 140-lb sacks	Number of 280-lb sacks	Number of barrels
50	25	35.7
100	50	71.4
150	75	107.1
200	100	142.8
250	125	178.6
500	250	357.1
1,000	500	714.2
1,500	750	1,071.4
2,000	1,000	1,428.6
2,500	1,250	1,785.7
3,000	1,500	2,142.8
4,000	2,000	2,857.1
5,000	2,500	3,571.4
7,500	3,750	5,357.1
8,000	4,000	5,714.3
10,000	5,000	7,142.8
12,000	6,000	8,571.4
14,000	7,000	10,000.0
15,000	7,500	10,714.3
16,000	8,000	11,428.6
17,500	8,750	12,500.0
18,000	9,000	12,857.1
20,000	10,000	14,285.7

No. of 5-lb sacks	No. of barrels	No. of 100-kilo sacks	No. of barrels
50	1.25	50	56.0
100	2.50	80	89.6
150	3.75	100	112.0
200	5.00	160	179.2
250	6.25	200	224.0
500	12.50	250	280.0
1,000	25.00	320	358.4
1,500	37.50	400	448.0
2,000	50.00	500	560.0
2,500	62.50	800	896.0
3,000	75.00	1,000	1,120.0
4,000	100.00	1,500	1,680.0
5,000	125.00	1,600	1,790.0
7,500	187.50	2,000	2,240.0
8,000	200.00	3,200	3,584.0
10,000	250.00	4,000	4,480.0
12,000	300.00	5,000	5,600.0
14,000	350.00	8,000	8,960.0
15,000	375.00	10,000	11,200.0
16,000	400.00	12,000	13,440.0
17,500	437.50	15,000	16,800.0
18,000	450.00	16,000	17,920.0
20,000	500.00	20,000	22,400.0

No. of 12¼-lb sacks	No. of 24½-lb sacks	No. of barrels
50	25	3.125
100	50	6.25
150	75	9.375
200	100	12.50
250	125	15.625
500	250	31.25
1,000	500	62.50
1,500	750	93.75
2,000	1,000	125.00
2,500	1,250	156.25
3,000	1,500	187.50
4,000	2,000	250.00
5,000	2,500	312.50
7,500	3,750	468.75
8,000	4,000	500.00
10,000	5,000	625.00
12,000	6,000	750.00
14,000	7,000	875.00
15,000	7,500	937.50
16,000	8,000	1,000.00
17,500	8,750	1,093.75
18,000	9,000	1,125.00
20,000	10,000	1,250.00

Canadian Package Differentials

The Canadian National Millers Association recommends the following list of domestic package differentials:

BASIS PER BBL—TWO 98'S, JUTE

Barrels	$ .70 per bbl over basis
Half barrels	1.40 per bbl over basis
Cotton—98's	.10 per bbl over basis
49's	.35 per bbl over basis
24's	.45 per bbl over basis
12's	.75 per bbl over basis
14's	.80 per bbl over basis
10's	1.05 per bbl over basis
7's	1.10 per bbl over basis
6's	1.10 per bbl over basis
Paper—49's	.10 per bbl under basis
24's	.20 per bbl over basis
7's	.70 per bbl over basis
3½'s	1.25 per bbl over basis
98's	.10 per bbl under basis
Jute—140's	.05 per bbl under basis
49's	.15 per bbl over basis
Covers	.20 per bbl over basis
Cotton seamless sacks—	
120's	.30 per bbl over basis
Gingham (20c per bbl over cotton)	.20 per bbl over basis

Returned bags: All bags, flour and feed, 7c each, delivered in good order.

Returned covers: All covers 10c each delivered in good order.

Canadian Net Weight Law

Canadian law requires that flour packed in bags or any other form of container must show by actual weight when packed 196 lbs of flour to the barrel, 98 lbs to the half barrel, etc. The weight of the package may not be included.

Canadian Inspection Charges

Fees chargeable for the inspection of staple articles under the general inspection and grain inspection acts of Canada:

Inspection of grain: per car, $1; in cargoes, $1 per 1,000 bus.

Weighing of grain: per car, $1; in cargoes, $1 per 1,000 bus.

Inspection of hay: per car, $1.

"Just what I wanted!"

This is a time of shifting values. A time when each of us is asking—How will *this* affect my business? How can I plan for the future? No one can say today just what adjustments tomorrow may require.

But the picture is not all dark—it has its bright side too—ours is an essential food product. The nation must have bread. Adjustments can be made—problems met and solved as they present themselves.

In times like these it is a mighty comforting thing, and mighty important, to know that you can depend on the backbone of your business—your most important raw material—your flour . . . to know that it is milled and backed by General Mills.

A firm foundation, something solid to tie to . . .

"Just what I wanted! . . . I got it

. . . from my General Mills man."

GENERAL MILLS, INC.

MINNEAPOLIS, MINNESOTA

TRADE NAMES:

El Reno (Okla.) Mill & Elevator Co.
General Mills, Inc. Southeastern Bakery Sales Office, Atlanta, Ga.
Great West Mill & Elevator Company, Amarillo, Texas
Kell Mill & Elevator Company, Vernon, Tex.
Oklahoma City (Okla.) Mill & Elevator Co.
Perry (Okla.) Mill & Elevator Company
Red Star Milling Company, Wichita, Kansas
Royal Milling Company, Great Falls, Montana
Sperry Flour Company, San Francisco, Calif.
Washburn Crosby Co., Buffalo, N. Y.
Washburn Crosby Company, Chicago, Ill.
Wichita Mill & Elevator Company, Wichita Falls, Tex.

Vitamin and Mineral Enrichment of Food

(Continued from page 7.)

sperm, the germ, and the branny layers. In round figures the germ constitutes about 2.5% of the wheat berry; bran may vary from 17 to 23%; and the endosperm portion comprises the remaining 75 to 80%. Whole wheat flour consists of the ground entire grain. In milling, wheat is successively ground, bolted and reground repetitiously in a manner designed to yield the largest possible percentage of finely divided endosperm. Sharp separations of the tissues such as might be made tediously with a scalpel cannot be achieved. Instead, products emerge which consist of patent flour, clear flour, shorts and red dog. Clears contain some of the finely ground outer layers of the wheat berry. The other products consist of mixtures in which the bran, germ and some endosperm are contained. They are feeds—not flours. Patent flours vary in extraction, and as the percentage of extraction increases the flour contains more of the outer layers of the wheat berry including some finely pulverized bran layers in the high extraction flours.

Let us now consider the vitamin and mineral content of wheat and its milled fractions. In this discussion the basis for expressing vitamin content is the one adopted by the government for definitions and labelling purposes, namely milligrams per pound. Unless otherwise indicated the analytical values that follow have been obtained in our laboratories.

Considerable variations are found in the thiamin content of wheat. Thirty-one samples of commercial bread wheats had values which ranged from 1.9 to 2.5 mg per lb with an average of 2.27 mg per lb. The variation in the thiamin content of known varieties is greater than the variation encountered in commercial wheat. A number of spring wheat varieties were collected from different locations in Minnesota and their thiamin determined. The data in Table I show that environment has a distinct influence on the thiamin content. Varieties grown at St. Paul, for example, are distinctly higher than the Crookston samples.

TABLE I

Thiamin Content of Spring Wheats

(Thiamin in milligrams per pound—13.5% moisture basis.)

Variety—	Location grown—St. Paul	Morris	Waseca	Crookston	Average thiamin
Renown	3.12	3.15	2.61	2.32	2.80
Rival	3.15	2.85	2.76	2.41	2.80
Pilot	3.49	2.75	2.94	2.42	2.90
Thatcher	3.08	2.63	2.39	2.10	2.55
Ceres	3.28	3.18	2.68	2.17	2.83
Marquis	2.82	2.96	2.71	2.01	2.63
Average	3.16	2.92	2.68	2.24	2.75

The thiamin content of winter wheats (Table II) shows the same tendency. Note the consistently lower values of the Hutchinson and Wichita samples. The average thiamin content is also lower than values obtained for the spring wheat samples.

TABLE II

Thiamin Content of Winter Wheats

(Thiamin in milligrams per pound—13.5% moisture basis.)

Location grown (Nebraska and Kansas)

Variety—	Lincoln	Dodge City	Wichita	Hutchinson	Average thiamin
Chiefkan	2.44	2.25	1.82	1.68	2.05
Blackhull	2.24	2.30	2.01	1.98	2.13
Turkey	2.48	2.57	2.01	2.05	2.28
Tenmarq	2.69	2.70	2.50	2.27	2.54
Average	2.46	2.45	2.09	2.00	2.25

A group of winter wheats with a larger geographical distribution is shown in Table III. The same general tendency to lower values than found for spring wheat will be observed. The average value for the winter wheats is 2.25 mgs of thiamin per pound. The spring wheat average by comparison is 2.75. The thiamin content of west coast wheats shown in Table IV averages about the same as wheat from the southwest.

TABLE III

Thiamin Content of Miscellaneous Winter Wheats

(Thiamin in milligrams per pound—13.5% moisture basis.)

Variety—	Thiamin
Chiefkan	1.78
Karmont	1.81
Iobred	2.08
Kanred	2.52
Blackhull	1.70
Superhard Blackhull	1.95
Turkey	2.62
Nebred	2.18
Cheyenne	2.38
Tenmarq	2.18
Kawvale	2.31
Average	2.14

TABLE IV

Thiamin Content of West Coast Wheats

(Thiamin in milligrams per pound—13.5% moisture basis.)

Variety—	Thiamin
Baart	2.31
Baart No. 17	2.24
Baart No. 38	2.11
Federation	1.76
Kharkof	1.94
Brevon	1.77
Turkey	1.85
Bluestem	2.44
Ridit	1.97
Rex	2.28
Hymar	2.36
Oro	2.04
Average	2.09

The thiamin values for Canadian wheat (Table V) have considerable variability, depending on location, the average agreeing closely with the Minnesota figure. Samples from Winnipeg appear to contain more thiamin than the samples from other locations in Canada.

Thiamin values for soft wheats grown in Ohio are shown in Table VI. These wheats are lower in thiamin than any of the previously mentioned groups.

TABLE V

Thiamin Content of Canadian Wheats

(Thiamin in milligrams per pound—13.5% moisture basis.)

Variety—Source—	Thiamin
Red Bobs—Winnipeg	2.70
Airdrie, Alta.	1.84
Thatcher—Winnipeg	2.64
Saltcoats, Sask.	2.10
Apex—Winnipeg	2.38
Kelvington, Sask.	1.99
Garnet—Winnipeg	2.28
Lacombe, Alta.	1.45
Reward—Winnipeg	2.61
Coderre, Sask.	2.35
Renown—Winnipeg	2.81
Gilbert Plains, Man.	2.24
Mindum—Winnipeg	2.69
Average of Winnipeg samples	2.59
Average of other samples	1.99
Average of total samples	2.31

TABLE VI

Thiamin Content of Soft Wheats

(Thiamin in milligrams per pound—13.5% moisture basis.)

Variety—	Thiamin
Trumbull	2.03
Purdue	2.00
Dawson	2.03
Fulcaster	2.10
Bald Rock	1.79
Wabash	1.87
Red Rock	2.02
Fulhio	2.09
Poole	2.02
Fultz	2.05
Gladden	1.97
Thorne	2.05
American Banner	2.01
Yorkwin	2.05
Canawa	2.38
Average	2.03

A general picture of the thiamin content of different classes of wheat is given in Table VII in comparison with limited data for some other cereal grains. Corn, rye, barley and sorghum have thiamin values substantially like wheat. The oat samples average much higher. It remains to be seen whether or not this high value will be confirmed by additional data.

TABLE VII

Thiamin Content of Cereal Grains

(Thiamin in milligrams per pound—13.5% moisture basis.)

Grain—	Thiamin
Spring wheats—Minnesota (24)	2.75
Canada	2.31
Winter wheats	2.17
West Coast wheats	2.09
Soft wheats	2.06
Corn—Yellow	2.44
White	2.76
Oats	4.20
Rye	2.11
Barley	2.95
Grain sorghums	2.68

The trends shown by all of the foregoing data on wheat have been substantiated many times, but more crop years require investigation before final conclusions can be drawn.

Turning now to riboflavin in wheat, the methods for determining vitamin B_2 have been satisfactory only comparatively recently. A discussion of methodology is beyond the scope of the present paper, but it will suffice to say that we now have two different methods which give concordant results, and that we feel reasonably confident that the results are accurate.

TABLE VIII

Riboflavin Content of Spring Wheats

(Riboflavin in milligrams per pound—13.5% moisture basis.)

Variety—	Location grown—St. Paul	Morris	Waseca	Crookston	Average riboflavin
Renown	0.52	0.57	0.52	0.52	0.53
Rival	0.45	0.45	0.50	0.45	0.48
Pilot	0.59	0.57	0.57	0.52	0.56
Thatcher	0.57	0.54	0.54	0.54	0.55
Ceres	0.54	0.54	0.57	0.52	0.54
Marquis	0.59	0.64	0.59	0.59	0.60
Average	0.55	0.56	0.55	0.53	0.54

When riboflavin was determined in the same spring wheats (Table VIII) for which the thiamin values were previously given, it was found that riboflavin did not fluctuate so widely as thiamin, and that on the basis of the data available, it does not appear to be greatly influenced by environment. The values obtained are all close to 0.50 milligrams per pound. These figures have also been substantiated many times.

TABLE IX

Niacin Content of Whole Wheat

(Niacin in milligrams per pound—13.5% moisture basis.)

Wheat types—	No. samples	Average niacin
Dark northern spring	11	30.0
Hard white spring	4	24.8
Dark hard winter	27	25.8
Soft red winter	9	26.4
Soft white winter	3	28.2
White club	1	25.4
Total samples	55	Average 26.8

The method for determining nicotinic acid (now called niacin) in wheat and flour is not in so satisfactory a state as the methods for vitamins B_1 and B_2. Dr. Elvehjem has reported values ranging from 22 to 32 mg per lb. (Table IX). Others have reported values in the same general range. The values obtained in our own laboratory average 27 mg per lb for 55 samples. This value is considerably higher than the level established for enriched flour, namely 6 mgs per lb.

Minerals in wheat of importance in nutrition are calcium, phosphorus and iron. Wheat is a poor source of calcium, and is unbalanced with respect to phosphorus which is present in much greater amount. Iron is of the most importance, and compared to other foods, wheat is a rich source. Whole wheat values for iron range from 0.0035 to 0.0050%, and average about 0.0045%. The latter figure is equivalent to 20.4 mgs per lb of wheat.

On the basis of the variations in the quantity of vitamins and minerals contained in whole wheat it is apparent that the concept of an average wheat as a norm for restoration purposes is completely academic. The next question of interest concerns the distribution of the vitamins and minerals in the products of milling, particularly in relation to the quantities prescribed in the regulations for enriched flour and bread.

Of the total thiamin in wheat, the endosperm contains about 24%, the embryo 15% and the branny layers 61%. While these figures show per cent distribution, they do not give a true picture because the products of milling are not sharply separated into these three categories.

Samples of wheat and the products milled from them were collected from ten mills, and the thiamin and ash were determined. Average figures and ranges are shown in Table X. Upon examination of the data, great variability in the figures may be noted. Patent flour varies 100%. First clear varies 300%. In general it has been found that patent flour contains about one-seventh of the thiamin of the whole wheat from which it is milled. It is evident that the feeds are highest in thiamin and patent flour lowest. Because of the great variability of thiamin in flour its value cannot be guessed; it must be determined. However, it can be said as a conservative generalization that patent flours will have at least 0.2 mg thiamin per lb. By scanning the figures in Table X it may be suspected that ash and thiamin are highly correlated. As a matter of fact, statistical computation of extensive data has shown that the correlation is very high, namely $R = 0.9498$, for bread wheat and it milled products.

TABLE X

Thiamin and Ash in Wheat and the Products of Milling

(Average of commercial millings in nine mills.)

Sample—	Per cent ash* Av'ge	Range	Thiamin* mg per pound Av'ge	Range
Patent flour	0.40	0.36-0.43	0.32	0.23- 0.48
First clear	0.68	0.44-0.85	1.20	0.50- 1.66
Second clear	1.33	0.88-2.34	3.76	2.00- 5.34
Red dog	2.83	2.44-3.70	11.74	10.39-13.45
Shorts	4.35	3.63-5.16	8.03	5.60- 9.83
Bran	6.52	6.30-6.94	3.99	2.76- 4.98
Wheat (cleaned)	1.56	1.40-1.75	2.20	1.97- 2.43

*All samples had about 11% moisture at time of analysis.

The relationship of thiamin and extraction can be shown graphically (Fig. I). The figures for high extraction flour are calculated and thus hypothetical rather than based on actual data. The curve serves to illustrate that the thiamin content of flour rises slowly as the per cent extraction is increased, due to the circumstance that the concentration of thiamin in the endosperm is somewhat uniform. When the per cent extraction approaches 75 a sharp rise occurs due to the inclusion of tissues adjacent to the bran and germ where the concentration of thiamin is much greater. Above 80% the curve tends to flatten out again because the concentration of thiamin in

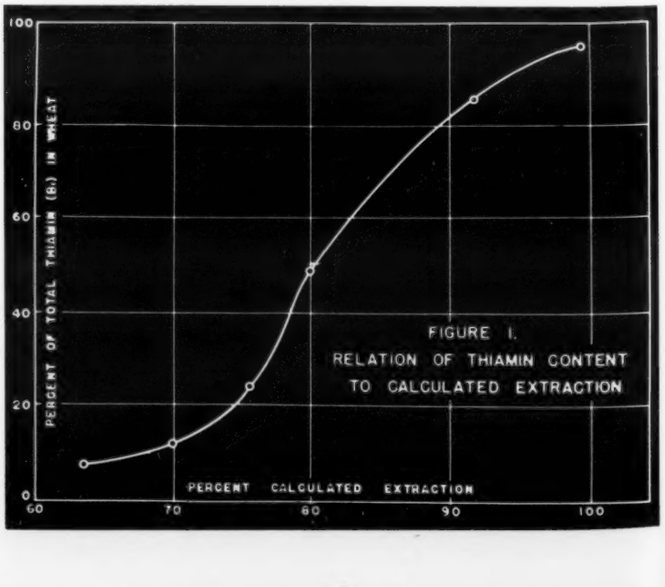

FIGURE I.
RELATION OF THIAMIN CONTENT TO CALCULATED EXTRACTION

the outer branny layers is relatively low.

The distribution of riboflavin (vitamin B_2) in the products of milling is also interesting, and is shown in Table XI. The distribution of vitamins B_2 and B_1 is in general similar, but it is by no means identical. While patent flour contains about one-seventh of the thiamin of whole wheat it has one-third of the riboflavin. Note also the higher concentration of riboflavin in the feeds as compared with the flours.

TABLE XI

Distribution of Riboflavin in Products of Wheat Milling

Mill product—	% of wheat	Ribo-flavin mg/lb	% of total riboflavin in wheat
Patent flour ..	65.0	0.15	20.5
First clear ...	5.5	0.23	3.2
Second clear...	4.5	0.84	7.7
Red dog	4.0	1.72	14.1
Shorts	12.5	1.27	32.5
Bran	8.5	1.27	22.0
Wheat	100.0	0.45	...

Patent flour values for niacin range from 3.5 to 6 mgs per lb, according to figures obtained in our laboratory. Substantially the same values have been reported by others. Whole wheat contains on the average about 27 mgs per lb but like other vitamins it varies somewhat.

The iron content of the products of milling is shown in Table XII. It can be seen that patent flour is low in iron and that it varies widely in different products. Patent flour contains, however, about half as much iron (3 mg per lb) as is required in enriched flour (6.0 mg per lb).

TABLE XII

Iron Content of Wheat and the Products of Milling

(13.5% moisture basis.)

Product—	% ash	% iron	% iron in ash
Patent flour ..	0.41	0.00078	0.190
First clear	0.82	0.0019	0.232
Second clear ..	2.34	0.0062	0.265
Red dog	3.70	0.0113	0.306
Shorts	4.18	0.0127	0.305
Bran	6.53	0.0126	0.193
Germ	4.14	0.0086	0.208
Wheat	1.65	0.0037	0.224

We are now ready for a comparison of whole wheat, patent flour and enriched flour. These comparisons are made in Table XIII. Only minimum standards for enriched flour are shown. The maximum levels have been set at four times the minimum, (except for thiamin for which the maximum is 2.5 mgs per lb), but millers will in all probability adhere to the minimum for economic reasons. There are several comparisons afforded by the table that are of particular interest. First, it is obvious that the values for patent flour fall far below those for whole wheat.

TABLE XIII

Nutritive Requirements of Enriched Flour in Comparison With Whole Wheat and Patent Flour

	Whole wheat, mg/lb	Patent flour, mg/lb	†Enriched flour, mg/lb	‡Daily requirement,* mg
Thiamin	2.20	0.35(14)	1.66(67)	1.00
Riboflavin ...	0.50	0.15 (3)	1.2 (24)	2.00
Niacin	25	3.5 (?)	6.0 (?)	(?)
Iron	18	3.0 (12)	6.0 (24)	10

*All persons 12 years or older. †Minimum government standard. ‡Defined by government.

Figures in parentheses represent per cent of the daily requirement contributed by 6.5 oz flour, the figures for average daily consumption in the United States.

On the other hand the thiamin, nicotinic acid and iron in whole wheat exceeds the minimum standard for these nutrients in enriched flour, and for the latter two, greatly exceeds it. In other words, restoration is not achieved for three of the four required nutritive factors in enriched flour. Riboflavin in enriched flour has been set at a level which is more than twice the value for whole wheat. In this instance fortification beyond restoration is required for the enriched product.

To make the subject more intelligible in terms of the contribution of the nutritive factors of enriched flour to the daily requirement, the figures in parentheses have been inserted. They represent the percentage of the daily requirement of the several nutrients contributed by 6.5 oz of flour, the figure for average daily consumption in the United States. The figures in the right hand column have been published in the *Federal Register* as the government's interpretation of minimum daily requirements.

It is clear that restoration of vitamins and minerals lost in processing has not been the sole guide post used in establishing enrichment levels. The niacin level was set before reliable figures were established for the quantity in wheat. Riboflavin has not been commercially available in quantities sufficient for carrying out the regulation. Accordingly, this part of the regulation has been suspended, and enriched flours on the market do not contain added riboflavin. The enriched level for iron could be criticised on the basis that the contribution thus made to the diet is practically insignificant. On the other hand the addition of iron to foods like flour is hazardous, because iron is known to accelerate rancidity. Hence the addition of iron must be made cautiously. Experiments have demonstrated that the quantity of iron in enriched flour does not affect its stability.

TABLE XIV

Nutritive Requirements of Enriched Bread in Comparison With Whole Wheat and White Bread

	White bread, mg/lb	Whole wheat bread, mg/lb	†Enriched bread, mg/lb	*Daily requirement, mg‡
Thiamin ..	0.35(13)	1.34(50)	1.0(38)	1.00
Riboflavin .	0.60(11)	0.82(16)	0.8(16)	2 00
Niacin	3.5 (?)	13.0 (?)	4.0 (?)	(?)
Iron	2.2 (8)	12.0 (45)	4.0(15)	10

*All persons 12 years or older. †Minimum government standard. ‡Defined by government.

Figures in parentheses represent per cent of the daily requirement contributed by six slices of bread, the figure for average daily consumption in the United States.

Standards of identity have likewise been set for enriched bread. In order to provide some picture of the relation of enriched bread to other breads, Table XIV has been prepared. This comparison needs to be taken with a grain of salt, because it was necessary to be arbitrary for purposes of illustration. The vitamins in bread may be contributed to substantially by yeast and milk. Bread is made with different percentages of yeast, and both with and without milk. When used at all, milk powder or its equivalent may be used in a bread formula at the rate of 6%, at which level bread will contain a quality equivalent to using fluid milk instead of water in the preparation of the dough. The figures in the table represent breads made with 6% dry skim milk and 2% yeast. Much bread is made with less milk powder, some around 3%. The whole wheat bread in the table likewise has 6% dry skim milk (which would be unusual), but this basis is used in order that the comparison of bread from patent flour and whole wheat may not be warped. Bread made from patent flour and powdered skim milk represents the best possible nutritive picture for white bread, hence this basis has been used.

The comparison of white bread, whole wheat bread and enriched bread shows (Table XIV) that whole wheat bread made with milk equals enriched bread in riboflavin and exceeds it in the other factors. The figures show that bread baked from whole wheat has substantially more thiamin than enriched bread of minimum standard. Bread baked from the series of whole wheat discussed earlier averaged 1.36 mgs of thiamin per lb or almost 40% higher than 1.0 mg required in enriched bread. There is about three times as much niacin and iron in whole wheat bread as is required in the enriched bread standard. Figures in parentheses show the percentage of the daily requirement of the several nutritive factors that are contributed by six slices of bread daily, the figure for average daily consumption. What the table does not show is the fact that enriched bread of minimum standard cannot be made with enriched flour of minimum standard. In the months intervening between the time government hearings on flour and bread were held, new facts and data led nutrition experts and the government to revise their ideas of added vitamins and minerals upward. Therefore it is expected that the minimum standards for enriched flour will be raised at some later hearing to bring enriched bour and bread into accord. Fundamentally, however, justification for higher standards for vitamins and minerals rests solely on the avowed purpose of the government to carry better nutrition to the entire population.

Thus far only the required ingredients for enriched flour and bread have been discussed. Under the new definition two optional ingredients are permitted, namely calcium and vitamin D. The minimum level for calcium in enriched flour has been set at 500 mg per lb, and for vitamin D at 250 U.S.P. units per lb. In enriched bread the minimum levels are 333 mg calcium and 160 U.S P. vitamin D units per lb. These nutrients have assumed lesser importance in the enriched flour and bread program because of their optional character. As they increase costs and are not required, with few exceptions they are not often encountered.

Another phase of the enriched flour and bread problem deserving mention is the effect of baking on the various vitamins. On the basis of extensive studies made by individual laboratories and collaborative committees, it was found that loss of thiamin due to the heat of baking is related directly to the temperature and duration of heating. These factors vary, naturally, but in general it may be said that under average baking conditions the loss will not be in excess of 15%. It is necessary, of course, to take account of this loss for the reason that the finished bread must conform to the standards. Flour and other ingredients together must provide a sufficient quantity of thiamin to compensate for any losses in processing. Toasting of bread involves further loss, and again the loss depends on the severity of heating. Hard brown toast may conceivably lose 50% of the thiamin originally present in the ingredients. Riboflavin and niacin appear to be stable at baking temperatures, since no measurable loss occurs.

A discussion of enriched flour and bread would be incomplete unless mention were made of breads prepared from whole wheat and long extraction flours. Many have advocated a return to whole wheat bread. It is a fact that the public prefers white bread. In spite of sales efforts, nutritional claims, food faddism, etc., the sale of whole wheat flour is less than 3% of the total flour sales. In addition whole wheat flour contains roughage which is not well tolerated by many people. It is for all these reasons, no doubt, that the Government and the Committee on Food and Nutrition of the National Research Council chose rather to sponsor enriched white flour as a vehicle through which to improve public health. However, the indiscriminate addition of vitamins or minerals to foods is vigorously opposed, and such additions are being restricted by legal means to a few selected foods, such as flour.

Attempts have been made to capture a greater percentage of the nutrients of whole wheat by making flours of longer extraction. In bread-making properties the best of these approach white bread, but have a darker appearance, somewhat coarser grain and sometimes less volume. They do not have the roughage of whole wheat bread. Such flours are not new, either here or abroad. Many foreign countries for economic reasons have fixed the percentage extraction by law at a level we in this country would regard as very high. It is, however, quite possible by judicious milling methods and the selection of appropriate flour streams to prepare essentially white flours with a much higher thiamin content than patent flour. England, on advice of her medical authorities, has adopted a flour extraction of 80 to 85%, and has planned the addition of thiamin as soon as it is commercially available in sufficient amount. Since last May, thiamin has been added to all the flour milled in Canada for export to Britain.

In Table XV the nutritive values of several types of flour are compared. The figures represent the daily contribution to the diet made by 6.5 oz of flour, which is the average daily consumption. The figures for daily requirement are those recently established by the Committee on Foods and Nutrition of the National Research Council. They are higher than the present government standards and, in general, are more favorably regarded by nutritionists. The long extraction flour in the table is the 80% extraction flour made by Canada for England. Note that its nutritive value is intermediate between enriched flour and whole wheat except in riboflavin, in which it is still very deficient. It is expected that the standards for niacin and iron in enriched flour will be raised, and if this is done, the figures for per cent daily requirement contributed by 6.5 oz flour will become larger.

TABLE XV

Comparison of the Nutritive Value of Several Types of Flour Expressed as Per Cent Daily Requirement Based on Consumption of 6.5 Oz Flour Daily

		% daily requirement contributed by 6.5 oz			
	Daily requirement, mg	Whole wheat flour	Patent flour	Enriched flour	Long extraction flour
Thiamin	1.8	50	8	37	27
Riboflavin	2.7	8	2	18	3
Niacin	18.0	56	9	13	21
Iron	12.0	67	11	20	30

*Committee on Foods and Nutrition of National Research Council.

When bread is made from each of these flours certain characteristic differences can be discerned. There is no apparent difference in the bread made from patent and enriched patent flour. The vitamins and minerals in the enriched flour have no measurable effect on such attributes as loaf volume, crumb color, texture and grain. The bread made from patent and enriched flour is whitest, has the best grain and texture, and the largest volume of them all. Bread made with the long extraction flour (80%) is darker in crumb color, has a smaller volume and poorer grain and texture. This bread would be described by an experienced baker as "coarser." Whole wheat bread has the darkest color and the smallest volume. Its grain and texture are the coarsest of the lot.

The subject of vitamin and mineral enrichment of foods is too extensive to be treated adequately in a short discussion. There are a host of problems concerned with such matters as, for example, the forms of iron suitable for enriched flour; the effect of iron on the stability of flour; and the nutritional availability of various forms of iron. The mechanics of the addition of vitamins and minerals and the preparation of a completely homogeneous product are other important phases of the subject. None of these problems have been discussed. The intent has been to give a broad picture of the enrichment program, rather than the minutia of parts of it. Vitamin and mineral enrichment of foods is a new departure both in food processing and food regulation. What its effect on the general public health will be, only the future will tell.

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Canadian Weights and Mensures

The legal weights and measures of Canada are the imperial yard, imperial pound avoirdupois, imperial gallon (of 277.27384 cubic inches), and the imperial bushel. The imperial gallon is equal to 4.54174 liters, while the wine gallon, used in the United States, is equal to 3.785 liters.

By Act 42d Vic. (1879), Chap. 16 (amended by Chap. 30, Acts of 1898), it is provided: That in contracts for sale and delivery of any of the undermentioned articles, the bushel should be determined by weighing unless a bushel measure be specially agreed upon, the weight equivalent to a bushel being as follows: wheat, 60 lbs; Indian corn, 56 lbs; rye, 56 lbs; peas, 60 lbs; barley, 48 lbs; buckwheat, 48 lbs; oats, 34 lbs; beans, 60 lbs; flaxseed, 56 lbs.

By the same act the British hundredweight of 112 lbs and the ton of 2,240 lbs were abolished, and the hundredweight was declared to be 100 lbs, and the ton 2,000 lbs avoirdupois, thus harmonizing the weights of Canada and the United States.

SOUTH CAROLINA ENRICHMENT LAW

South Carolina has enacted a bill requiring the enrichment of all white flour, self-rising flour, white bread, and white-whole wheat bread and/or flour manufactured or sold in the state. It also requires that such products be labeled in accordance with the federal labeling regulations. The law is effective Aug. 1, 1942.

Under the bill all white and self-rising flour (with certain exceptions) must be enriched in accordance with the present federal standards for enriched flour. And, the state department of agriculture is empowered, and directed, to change or add to the specifications when, and if, the federal standards are changed.

The complete text of the law follows:

A BILL to Require the Enrichment of White Bread, White Flour and Self-Rising Flour by the Addition of Certain Vitamins and Minerals and to Prescribe the Methods of Enrichment and Fix Penalties for Violation of Same; and to Provide Appropriation for Enforcing Same.

BE IT ENACTED by the General Assembly of the State of South Carolina:

Whereas: There exists a widespread deficiency of certain constituents in foods necessary to the health and well-being of the consumer and to protect so far as may be possible the health of the people of South Carolina against such deficiency by providing for the addition of such necessary constituents, normally present in wheat, to flour and to bread, and to provide formulas for such addition and rules for its enforcement.

Section 1: On and after the effective date of this act it shall be unlawful for any person, firm or corporation except as hereinafter provided to manufacture, mix, compound or sell for human consumption in the State of South Carolina any white flour or self-rising flour (made from wheat) which does not contain the vitamins and other ingredients contained in the following formula:

(a) White flour shall contain in each pound not less than 1.66 milligrams and not more than 2.5 milligrams of Vitamin B_1 (thiamin), not less than 6 milligrams and not more than 24 milligrams of nicotinic acid (also recognized under the name of niacin), or nicotinic acid amide (also known under the name of niacin amide), not less than 6 milligrams and not more than 24 milligrams of iron (Fe).

(b) If other vitamins or minerals are added to bread or flour they shall be added only in accordance with the regulations of the Federal Security Agency.

(c) These ingredients and amounts are in accordance with the definition of enriched flour as promulgated by the Federal Security Agency. (Federal Register, May 27, 1941, pp. 2574 to 2582; and Dec. 3, 1941, pp. 6175 and 6176, postponing the effective date of riboflavin as a required ingredient in enriched flour.) The State Department of Agriculture is empowered with the authority, and is directed, to change or add to the specifications for ingredients and the amounts thereof required to conform to changes in the federal definition of enriched flour.

(d) Iron shall be added only in forms which are harmless and assimilable. The substances referred to in section 1 (a) and 1 (b) may be added in a harmless carrier which does not impair the enriched flour or enriched self-rising flour, such carrier is used only in the quantity necessary to effect an intimate and uniform admixture of such substances with the flour.

Sec. 2: All white bread sold, or offered for sale, within the State of South Carolina shall be enriched to contain in each pound, as sold, not less than 1.0 milligram and not more than 2.0 milligrams of Vitamin B_1 (thiamin), not less than 4.0 milligrams and not more than 16.0 milligrams of nicotinic acid (niacin) or nicotinic acid amide (niacin amide), not less than 4.0 milligrams and not more than 16.0 milligrams of iron (Fe).

(a) The enrichment of white bread may be accomplished through the use of enriched flour, enriched yeast, other enriched ingredients, synthetic vitamins, harmless iron salts or by any combination of methods which will produce enriched bread which meets the standards herein defined.

(b) The State Department of Agriculture is empowered with the authority and directed to change, or add to, the specifications for ingredients and the amounts thereof required to conform to the federal definition of enriched bread when promulgated.

Sec. 3: All enriched flour or bread sold in the State of South Carolina must be labeled in accordance with the regulations of the Federal Security Agency, governing enriched flour or enriched bread sold in interstate trade.

Sec. 4: The provisions of this act shall be enforced by the Department of Agriculture, which department is authorized and directed to issue such rules as may be necessary to regulate the manufacture and sale of flour and bread in this state under the provisions of this act. The department or its agent representatives shall have authority to enter upon the premises of any manufacturer of flour or bread, and of any wholesale or retail dealer in flour or bread, for the purpose of inspecting and analyzing flour or bread which may be offered for sale; and any person, firm or corporation found guilty of violating the terms of this act shall be subject to fine for each and every offense, in a sum of not exceeding $100 or by imprisonment not exceeding 30 days.

Sec. 5: The terms of this act need not apply to flour ground for the wheat producer whereby the miller is paid in wheat or feed for the grinding service rendered, except in so far as such a mill may manufacture toll wheat into flour and sell or offer for sale such flour, whereupon this act shall be applicable, nor shall the provisions of this act apply to farmers in exchanging their wheat for flour, or having the same ground into flour and disposing of the same for their own use, or the use of farm labor on their farms.

The terms of this act as regards flour shall not apply to flour sold to bakers or other commercial secondary processors provided the purchaser furnishes to the seller an approved certificate of intent to use said flour solely in the production of enriched flour or enriched bread as herein defined or in the manufacture of legitimate products not covered by the provisions of this act.

The terms of this act shall not apply to flour or bread which is made from the entire wheat with no parts of the wheat removed from the mixture. In cases of flour or bread containing mixtures of the whole wheat berry and white flour or mixtures of various portions of the wheat berry, such products shall have a vitamin and mineral potency at least equal to enriched flour or enriched bread as described in Sections 1 and 2 of this act.

Sec. 6: Whenever any person, firm or corporation subject to the provision of this act shall submit to the Commissioner of Agriculture an affidavit claiming a shortage or imminence of shortage of any vitamin or mineral element added to a food as required by this act, the Commissioner shall request information from the War Production Board or other federal agency responsible for information concerning said availability.

If factual information can be obtained within 10 days from said source this information shall be considered as final and the South Carolina Commissioner of Agriculture is hereby instructed to act thereon. However, if said information is not available the Commissioner of Agriculture shall hold a public hearing within 10 days. If in the judgment of the Commissioner, the testimony presented shows that the sale and distribution of a food may be substantially impeded by the enforcement of the provisions of this act, he shall immediately suspend such parts of the act which may impede such sale; provided such suspension shall be revoked as soon as adequate supplies of such vitamins and minerals become available in the judgment of the Commissioner, based on information from said federal agencies or testimony at a public hearing.

Sec. 7: There is hereby appropriated from the general funds of the state the sum of $2,500 or so much thereof as may be necessary, available to the Department of Agriculture, to be used by it in enforcing the provisions of this act during the fiscal year 1942-43.

Sec. 8: All acts or parts of acts inconsistent with the provisions of this act are hereby repealed to the extent of such inconsistency.

Sec. 9: This act shall take effect Aug. 1, 1942.

Trade Agreements, Import Duties Unavailable

For several years THE NORTHWESTERN MILLER ALMANACK, with the co-operation of the Division of International Economy of the United States Department of Commerce, has compiled statistics listing effective trade agreements between the United States and foreign countries; tariff concessions obtained by the United States on grains and grain products in trade agreements; and world import duties on grains and grain products for all the countries of the world. However, with the cessation of normal trade movement in all parts of the world, this material is now of doubtful value and THE NORTHWESTERN MILLER ALMANACK will discontinue the publication of such information for the duration. The most recent statistics obtainable appear on pages 13, 14, 20-22 of the 1941 ALMANACK.

GRINDING FLOUR IN BOND

The following summary gives the text of the sections of the United States tariff act of 1930 relating to the grinding of wheat in bond, and also brief notes as to the regulations of the Department of the Treasury in connection with the administration of these sections of the law.

GRINDING IN BOND

Sec. 311. All articles manufactured in whole or in part of imported materials, or of materials subject to internal-revenue tax, and intended for exportation without being charged with duty, and without having an internal-revenue stamp affixed thereto, shall, under such regulations as the Secretary of the Treasury may prescribe, in order to be so manufactured and exported, be made and manufactured in bonded warehouses similar to those known and designated in Treasury Regulations as bonded warehouses, class six: Provided, That the manufacturer of such articles shall first give satisfactory bonds for the faithful observance of all the provisions of law and of such regulations as shall be prescribed by the Secretary of the Treasury:

[Note.—An Act of Congress approved June 12, 1934, amends the Tariff Act of 1930 by adding thereto a new provision (sec. 350) authorizing the President, among other things, to enter into trade agreements with foreign governments. The act of 1934 relates to the application of the paragraph of sec. 311 quoted above, the pertinent text being as follows: "The third paragraph of section 311 of the Tariff Act of 1930 shall apply to any agreement concluded pursuant to this act to the extent only that such agreement assures to the United States a rate of duty on wheat flour produced in the United States which is preferential in respect to the lowest rate of duty imposed by the country with which such agreement has been concluded on like flour produced in any other country; and upon the withdrawal of wheat flour from bonded manufacturing warehouses for exportation to the country with which such agreement has been concluded, there shall be levied, collected and paid, on the imported wheat used, a duty equal to the amount of such assured preference."]

Whenever goods manufactured in any bonded warehouse established under the provisions of the preceding paragraph shall be exported directly therefrom or shall be duly laden for transportation and immediate exportation under the supervision of the proper officer who shall be duly designated for that purpose, such goods shall be exempt from duty and from the requirements relating to revenue stamps.

No flour, manufactured in a bonded manufacturing warehouse from wheat imported after ninety days after the date of the enactment of this Act, shall be withdrawn from such warehouse for exportation without payment of a duty on such imported wheat equal to any reduction in duty which by treaty will apply in respect to such flour in the country to which it is to be exported.

Any materials used in the manufacture of such goods, and any packages, coverings, vessels, brands, and labels used in putting up the same may, under the regulations of the Secretary of the Treasury, be conveyed without the payment of revenue tax or duty into any bonded manufacturing warehouse, and imported goods may, under the aforesaid regulations, be transferred without the exaction of duty from any bonded warehouse into any bonded manufacturing warehouse; but this privilege shall not be held to apply to implements, machinery, or apparatus to be used in the construction or repair of any bonded manufacturing warehouse or for the prosecution of the business carried on therein.

BY-PRODUCTS RETAINED

Articles or materials received into such bonded manufacturing warehouse or articles manufactured therefrom may be withdrawn or removed therefrom for direct shipment and exportation or for transportation and immediate exportation in bond to foreign countries or to the Philippine Islands under the supervision of the officer duly designated therefor by the collector of the port, who shall certify to such shipment and exportation, or ladening for transportation, as the case may be, describing the articles by their mark or otherwise, the quantity, the date of exportation, and the name of the vessel: Provided, That the by-products incident to the processes of manufacture, including waste derived from cleaning rice in bonded warehouses under the act of March 24, 1874, in said bonded warehouses may be withdrawn for domestic consumption on the payment of duty equal to the duty which would be assessed and collected by law if such waste or by-products were imported from a foreign country: Provided, That all waste material may be destroyed under government supervision. All labor performed and services rendered under these provisions shall be under the supervision of a duly designated officer of the customs and at the expense of the manufacturer.

A careful account shall be kept by the collector of all merchandise delivered by him to any bonded manufacturing warehouse, and a sworn monthly return, verified by the customs officers in charge, shall be made by the manufacturer containing a detailed statement of all imported merchandise used by him in the manufacture of exported articles.

Before commencing business the proprietor of any manufacturing warehouse shall file with the Secretary of the Treasury a list of all the articles intended to be manufactured in such warehouse, and state the formula of manufacture and the names and quantities of the ingredients to be used therein.

Articles manufactured under these provisions may be withdrawn under such regulations as the Secretary of the Treasury may prescribe for transportation and delivery into any bonded warehouse at an exterior port for the sole purpose of immediate export therefrom.

The provisions of section 3433 of the Revised Statutes shall, so far as may be practicable, apply to any bonded manufacturing warehouse established under this Act and to the merchandise conveyed therein.

DRAWBACK

Sec. 313. (a) Article made from imported merchandise.—Upon the exportation of articles manufactured or produced in the United States with the use of imported merchandise, the full amount of the duties paid upon the merchandise so used shall be refunded as drawback, less 1 per centum of such duties, except that such duties shall not be so refunded upon the exportation of flour or by-products produced from wheat imported after ninety days after the date of the enactment of this Act. Where two or more products result from the manipulation of imported merchandise, the drawback shall be distributed to the several products in accordance with their relative values at the time of separation.

BONDED WAREHOUSES

Sec. 555. Bonded Warehouses. Buildings or parts of buildings and other inclosures may be designated by the Secretary of the Treasury as bonded warehouses for the storage of imported merchandise entered for warehousing, or taken possession of by the collector, or under seizure, or for the manufacture of merchandise in bond, or for the repacking, sorting, or cleaning of imported merchandise. Such warehouses may be bonded for the storing of such merchandise only as shall belong or be consigned to the owners or proprietors thereof and be known as private bonded warehouses, or for the storage of imported merchandise generally and be known as public bonded warehouses. Before any imported merchandise not finally released from customs custody shall be stored in any such premises, the owner or lessee thereof shall give a bond in such sum and with such sureties as may be approved by the Secretary of the Treasury to secure the Government against any loss or expense connected with or arising from the deposit, storage, or manipulation of merchandise in such warehouse. Except as otherwise provided in this Act, bonded warehouses shall be used solely for the storage of imported merchandise and shall be placed in charge of a proper officer of the customs, who, together with the proprietor thereof, shall have joint custody of all merchandise stored in the warehouse; and all labor on the merchandise so stored shall be performed by the owner or proprietor of the warehouse, under supervision of the officer of the customs in charge of the same, at the expense of the owner or proprietor. The compensation of such officer of the customs and other customs employees appointed to supervise the receipt of merchandise into any such warehouse and deliveries therefrom shall be reimbursed to the Government by the proprietor of such warehouse.

REGULATIONS

Owing to the many provisions and the changes in regulations prescribed by the Department of the Treasury for bonded manufacturing warehouses, any miller desiring to grind wheat in bond should apply to the Secretary of the Treasury for the latest regulations on the subject. In general, the regulations prescribe that buildings or parts of buildings and other inclosures may be designated as bonded manufacturing warehouses. The amount of the bond depends on the quantity of imported wheat handled. It is necessary that a customs storekeeper be present at all times while the warehouse is in operation, and the proprietor is required to reimburse the government for the storekeeper's salary.

A Miller's Horn

In the museum at Rochester, Eng., is exhibited an ancient miller's horn (flour measure), discovered some time ago at a derelict windmill near Leeds Abbey to the east of Maidstone. The tool, an old ox-horn, curiously cut in a diagonal direction across its widest part to form an irregular spoon, caused considerable speculation until its correct use was made known.

In contrast to the United States, Canada and Australia, where wheat often has to travel 1,000 and more miles before it reaches its port of exportation, wheat production in Argentina is almost entirely confined to an area within not more than 150 miles from the principal seaports. Twenty years ago large high-wheeled carts with a loading capacity up to seven tons, and drawn by 12 and more horses, were used for transporting wheat over long distances. Today this transportation is largely carried out by truck services on trunk roads.

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